Dr. Eugene and Linda Lloyd
Longtime Supporters of the College
2004 is our 125th year - educating over six generations of veterinarians with knowledge, skills and abilities to meet a changing world. Now, with our Creating the Future Campaign to modernize, we need to be clear about innovative programs that justify these new facilities. Three bedrock principles of the veterinary profession have been defined by a distinguished Canadian veterinarian, Ole Nielsen, who says that our primary purpose is to service society, including its role as guardian of animal welfare, to deal with health and disease in vertebrates, including people, and to use comparative medicine as the common basis for what we do. From this, we can develop a matrix for the future.

**Biomedical sciences.** Comparative medicine is playing an increasing role in veterinary medicine, and those colleges that invest in BMS will prosper most. At Iowa State, we do that in neuroscience, helping to understand the basic science of neurologic disease, including the prion-induced transmissible spongiform encephalopathies. If ISU is to meet the future, we must develop an undergraduate degree in biomedical sciences and exploit the CVM campus as a center for life sciences education and research.

**Ecosystem health.** Globalization and industrialization continue to confound our biosphere. Our heritage must include managing the animal health components of healthy ecosystems to select methods in production animal medicine that conserve ecologic interplay while nature products are being harvested. Veterinary Medicine must lead this issue, and must do this in the context of factors which drive ecosystem health: economic development, public opinion and federal inspiration.

**Animal welfare.** Veterinarians must lead change for animal welfare. The schemes of some animal rights cults use an odd mix of misinformation, emotional fragility and carelessness about feeding the world’s population, to drive public ignorance about meat. A television program of last year, must surely lead to hand-wringing among vegetarians. The Secret Life of Plants, a documentary with a catchy Stevie Wonder soundtrack, suggested that even plant life is sentient – plants attached to an electro-encephalogram-like machine showed increased and bizarre movement when distressed. But humans are omnivores and we need to eat something.

**Food safety.** Among all our concerns for human health, surely the most immediate is a safe food supply. That there has been no terrorist event in the food industries
 comparable to the World Trade Center destruction is due, in no small way, to the effective barriers already in place by federal and state agencies. But the rules of the game keep changing. There is no zero risk when global commerce is coupled with a worldwide network of informed terrorists armed with modern technology and dedicated to murder and economic destruction of the United States. For higher security, we have to ask the right questions.

In a recent statewide poll, when asked if cuts in state government had any impact on their lives, 70 percent of the respondents answered no. Editorialists in the Des Moines Register used this as evidence that Iowa taxpayers weren’t really being seriously affected by four years of budget reductions. Give me a break. That cutting budgets of education doesn’t influence the skills of our workforce is bonkers – someone out there is living in la-la land. But that was the wrong question. When stated that way, I am surprised that the answer wasn’t that 90 percent felt unaffected. The right questions are: “Do cuts in education have long-term effects on the economic development?” and “Does cutting agriculture and animal health programs have serious impacts on food production?” Then let us see what the answer is from a reasoned and clear thinking group of Iowa taxpayers. None of this would matter if universities were prepared to let academic excellence go hang, but the price paid for fiscal negligence is deferred and vastly underestimated. For the future of Iowa State, college leadership means devotion to a good-to-great transition. This involves commitment to hiring faculty with diverse experiences and credentials from other institutions, avoiding the myth that good teaching is mutually exclusive with research, shedding faculty who ignore scholarly activity and increasing the scientific rigor of the curriculum. Our success in the good-to-great transition rests on how faculty commit to scholarly activity in teaching, research and professional practice.

**NEWS**

On August 16, 2004, Dr. John Thomson (’67), dean of veterinary medicine at Mississippi State University, will become the dean of Iowa State’s College of Veterinary Medicine. He replaces Dean Norman Cheville, who is retiring.

Dr. Thomson was appointed by ISU Provost Ben Allen following a nine-month nationwide search.
Yet his job descends from a trade as old as metal itself; a craft handed down from medieval to modern, from master to apprentice.

White is a farrier. In some circles, he’s called an equine podiatrist. In others, he’s known as a “shoer.”

White custom-builds and fits corrective shoes for horses at the Veterinary Teaching Hospital. Only a handful of veterinary colleges have farriers on staff, which is one reason White’s clients come from throughout the country.

The other reason?

“Dan is one in a million,” said Diane Grossman, whose racehorse Captain Fina traveled from Texas for hoof care from White.
“People use horses for sports, and, like human athletes, their anatomy wears out. It takes a toll.”

“I won’t take my horse to another farrier. Not all farriers specialize in therapeutic work,” Grossman said. “Captain Fina is an extremely talented racehorse. If his shoeing isn’t done right, it could end his career.”

The profession of farriery nearly disappeared with the advent of automobiles and tractors. It has experienced a revival over the past 50 years, however, with the increasing popularity of the horse in sport and show. White’s patients are racehorses, barrel horses, trail horses and jumpers.

“People use horses for sports, and, like human athletes, their anatomy wears out. It takes a toll,” White said.

And it keeps White busy. Much of the year, he treats and shoes an average of nine horses a day. His day can start as early as 6 a.m. and ends whenever he has finished — as late as 9 or 10 p.m. He participates in rounds with equine clinicians and students, and sees horses the rest of the day. White spends from 15 minutes to six hours with a horse. Most are shod in the stall next to his shop; others are treated in surgery while anesthetized. Some days his patient load necessitates extra help from one of the 50 other farriers in Iowa. During two weeks each year, he teaches equine podiatry to fourth-year veterinary students.

Farriery requires skills that don’t come easily. White attended farrier school in Kentucky, then apprenticed for three years. He’s a certified journeyman farrier, the highest level of certification available. He’s been with Iowa State for five years.

“When I grew up, we could never touch a horse’s feet. We always had to consult with the farrier. Even our vet had to consult with the farrier! I never would have guessed I’d grow up to be one,” White said.

“I just wanted to learn how to do my own horse and I kind of got carried away with it,” he chuckled.

White tends to horses with laminitis (a painful disease that affects horses’ feet) lameness problems, fractures and navicular syndrome (a common degenerative disease of a bone inside the hoof). Each case is different and requires a distinctive solution.

“It’s a creative job. The equine clinicians and I put our heads together and usually we can determine the best therapy and type of shoe for the horse,” White said.

White takes the idea into his workshop and fires up a gas forge the size of a microwave. Although the small shop houses a grinder-buffer, drill, bench sander and electric saw, most of the tools are primitive looking hammers, mallets and anvils.

“Many tools look the same as they did 100 years ago. The profession really hasn’t changed much,” White said.

White begins the actual shoemaking with a lengthy, thin bar of steel or aluminum. Using long-handled tongs, he holds the metal in the forge until it heats to a dull red or straw color, then quickly moves it to the anvil. With a hammer, he shapes the glowing metal into a curve the shape of the horse’s foot. He repeats the process several times — back and forth between forge and anvil — refining curves, punching in ridges or hammering the crease in the shoe. The nail holes are punched last.

Nailing the shoe onto the horse is among the farrier’s most crucial jobs. Farriers are trained to know precisely where to place the nail within an area of the hoof wall that is no wider than one-eighth of an inch. White performs the task with confidence and skill.

White expects to be a farrier for as long as he can. Much like jumpers and racehorses, farriers pay a price for doing what they love.

“This is a physically demanding job. Once a horse threw me down and I landed in physical therapy,” he said.

“But I really like it. There’s a new challenge everyday and sometimes it’s tough to figure out,” he said.

“It’s pretty exciting when a horse that can’t stand up when it comes in, eventually walks and performs again because of something I did.”
Q. How can veterinary colleges better prepare new graduates for swine practice?

A. Provide a broader representation of the career opportunities available to veterinarians in general and swine veterinarians specifically. Veterinary schools must arm new swine veterinarians with problem-solving skills, in addition to knowledge base. More emphasis on multi-etiologic disease conditions is necessary today than in the past. Generally speaking, the diseases we deal with in swine practice have not changed dramatically in the past ten years, but the impact of environment, management and genetic base has changed dramatically. As a result, the clinical presentations of specific diseases in swine have become quite vague. The necessity of evidence-based medicine is greater than ever in swine practice. Training that employs case-based scenarios helps to prepare students for swine practice and develops the thought process necessary.

Q. Given your experience with a large swine integrator, does the college need to train swine veterinarians differently than in the past?

A. Certainly, and any approach we settle on now will need updating in the future as the industry continues an enormous rate of change in structure and production practices. Swine production, and therefore swine veterinary practice, is employing more business principles, hazards analysis, and statistical evaluation. Veterinarians need a basic understanding of these ideas so they may communicate with business owners and producers.

Veterinarians are being called to the board room to explain the performance impacts of disease to shareholders, accountants and salespeople. Being able to communicate veterinary knowledge to these people in their language is essential. Larger integrated systems are typically data-rich and analysis-poor, which means that the appropriate application of epidemiological techniques can answer many more health questions than individual pig physical exams. Given the mission of the veterinary school and the time set aside for veterinary education, it might be necessary to require different prerequisites of students who will practice food animal medicine, rather than adding a lot of additional topics to the

Dr. Locke Karriker, assistant professor of veterinary diagnostic and production animal medicine. Prior to joining the Iowa State faculty in 2003, Dr. Karriker was a production veterinarian for Seaboard Farms in Guymon, Okla. He is a 1999 graduate of Mississippi State University College of Veterinary Medicine.
curriculum. A larger emphasis needs to be placed on preventive techniques. Most large systems view treating sick animals as inefficient and, in essence, as a salvage operation that is necessitated by not having prevented the disease condition. Larger operations may have some funds available for internal research and development. Swine veterinarians need to be able to conduct field research trials that produce confident answers.

Q. Name the three skills necessary for success in swine practice.

A. 1) The ability to self-educate is critical. Most of the knowledge base I graduated with has changed or been updated. Swine veterinarians must keep current.

2) Swine veterinarians must develop a consistent, thorough problem-solving approach. Certainly there are many techniques and strategies that work and all are acceptable. The key is having a consistent approach to health evaluation and disease problems every time so that subtle changes over time are not missed, and you don’t become complacent.

3) Tenacity. Swine health problems in modern production systems are intricate, vague and rapidly changing. The production systems can be very complex in structure and organization. It is frequently necessary to break the problem into smaller pieces and work through them one by one. Many health interventions do not yield instant improvements in larger systems. Swine veterinarians in these systems must convince themselves and others to give interventions time to produce improvement without constantly changing approaches to the problem.

Q. If you could go back and do something differently during veterinary school, what would it be?

A. Pay more attention to and learn more about species that I was not interested in treating such as poultry, catfish and dairy. Some of the best inspiration for new treatment strategies or approaches comes from cross application of treatments in other species. This is a huge benefit of the comparative approach to learning veterinary medicine. Additionally, I would have taken more initiative to seek out the experts in my areas of interest earlier in veterinary school, rather than waiting until the curriculum brought us into contact later.

Q. There appears to be more demand than supply of food animal veterinarians. How can the college do a better job of recruiting and selecting food animal students?

A. Understanding why the most successful current food animal veterinarians pursue that specialty would be useful information for identifying the next practitioners. It must be incumbent on food animal faculty to get involved with and get to know the first-year students earlier, maybe even in undergraduate courses, to help expose them to the opportunities.

My perception is that not all students walk in with a conviction about what type of practice or species interests them, and there is a lot of opportunity in that undecided pool of talent. We also need to figure out how the veterinary college might encourage and support mentoring relationships prior to college between practicing food animal veterinarians and high school students in local communities. Given the multitude of new roles that are opening to food animal veterinarians, such as Dr. Beth Lautner’s appointment as director of the Plum Island Animal Disease Center in New York, there will always be a shortage of food animal veterinarians, regardless of how many students pursue that focus.
THE DEPRESSION
After the stock market crash of 1929, the depression of the 1930s began. During that period, the numbers of animals admitted to the college hospital dropped to new lows. At one point, there was only one large animal in the hospital, and days would pass without a patient being admitted.

In 1933 space allotted for pig pens was converted to stalls to make room for an increased number of draft horses admitted to the hospital. When the encephalomyelitis epizootic struck central Iowa in 1938, many horses in various stages of the disease were admitted for treatment. The loss of horses from the disease hastened the switch to mechanized farming, subsequently the use of the draft horse practically disappeared.

From 1925 to 1950, some predicted the end of the large animal clinic, yet there were more demands than ever on the clinic as the value of beef cattle went up and the numbers of pigs in the state increased.

USDA RESEARCH LABORATORY
In 1956, the USDA announced that it would locate its animal disease research laboratory in the Ames area. For 50 years, the National Animal Disease Center has been a valuable adjunct to the veterinary college.

FACILITIES
Planning for a new veterinary building complex began in 1963. In 1972, construction started. The $25.7 million facilities, completed in 1976, constitute almost twice the space formerly available on central campus at the Veterinary Quadrangle, bringing under one roof all functions of the veterinary college with the exception of the nearby Veterinary Medical Research Institute. The new facilities, still in use today, total nearly 13 acres.
When the building was in the planning stage, 64 students per year were being admitted to the college. In the new facilities, 100 to 120 students can be accommodated in each class.

An interesting aspect of the building's design is the use of colored-coded doors in each department to help visitors and employees locate respective areas. But even with the best laid plans, alumni, visitors and employees still find themselves “lost” from time to time.

THE GENTLE DOCTOR
One of the most recognizable statues in veterinary medicine is The Gentle Doctor. The statue was created in 1938 by Christian Petersen while he was resident artist at Iowa State University.

The statue, seven feet tall, is a veterinarian holding an injured or sick puppy. The mother dog is leaning against the doctor's knee, waiting at his feet. Dr. L. M. Forland ('41) was a model for Petersen when he was a pre-vet student earning his way through school by doing janitorial work. Petersen had Forland hold a small pillow between his forearms. The small pillow became the puppy that is the focal point of the statue.

The original terra cotta statue was placed in front of the Veterinary Quadrangle in 1938. It remained there until 1976 when it was refurbished and placed in a protected setting inside the Scheman Building at the Iowa State Center. A bronze replica of the statue was commissioned by Dr. and Mrs. John E. Salsbury to serve as the focal point on the entrance of the college's new facilities.

THE VETERINARY DIAGNOSTIC LABORATORY
Although diagnostic services were ongoing since 1892, it wasn't until 1946 that the Veterinary Medical Diagnostic Laboratory was organized as a unit of the college. In 1953, a total of 207,016 specimens were examined, compared to 150,400 in 1952. The majority of the increase was in the number of brucellosis tests performed by the laboratory.
In 1955 the college introduced the first of several agreements with other states to train those state’s students in veterinary medicine. The first agreement was made with the state of Nebraska for a period of ten years.

Changes to the preveterinary curriculum were approved by the college faculty in 1977. For those students admitted into the college in 1980 and thereafter, the requirements were increased to include a bachelor’s degree or three years in a declared major toward a bachelor’s degree along with specified courses.

The professional curriculum was substantially revised in 1966. The first year of the curriculum was designed to provide an understanding of the anatomy, biochemistry and the physiology of the normal animal. The second year was concerned with teaching the causes, mechanisms, and the body’s response to disease, and agents used in treating diseases. The third year of the curriculum concentrated on the symptoms, diagnosis and rational for treating specific diseases. The fourth year is devoted to applied clinical science courses.

The Veterinary Medical Alumni Association of Iowa State celebrates its 50th anniversary in 2004. Established in 1954, the association’s objectives were to further the interests of its veterinary alumni and promote the interests of the college and the profession. Its first president was Dr. Stanley L. Hendricks (’63).

The Kapper Chapter of the Omega Tau Sigma, a national professional fraternity in veterinary medicine, was established at Iowa State in 1965.
The past few months have been truly amazing as far as development goes in the College of Veterinary Medicine. Amazing, in that each event has shown evidence of the financial support alumni and friends are providing for this college. These include:

- **College’s Awards Night** On April 15, the college presented students with 260 scholarships and awards valued at $359,100. All of the scholarships and awards are funded by alumni and friends who have created named scholarship endowments, contributed annually for a specific scholarship or donated to the veterinary medicine scholarship fund. We are grateful for the money to support these scholarships, which allow students to reach their educational goals.

- **Sustaining Member Dinner** On April 16, about 100 alumni and friends who have contributed $7,500 or more to the college, met for the annual Sustaining Member of the Veterinary Quadrangle Recognition Society Dinner. The highlights of the dinner are scholarship recipients who get to meet their scholarship donors.

- **Major gift announcement** On May 20, alumni and friends met on the Veterinary Medicine Courtyard to recognize the generosity of Dr. Eugene (’49, PhD ’70) and Linda Lloyd of Fort Myers, Fla. Their $3.5 million commitment to the Veterinary Teaching Hospital project is the lead private gift for the Creating the Future Campaign. Their thoughtfulness in making this commitment shows that alumni of the college are grateful for their educational experience at Iowa State.

- **Annual Fund** Over the past few months, ISU Foundation student callers have asked college alumni to make a gift or pledge to the modernization of the Veterinary Teaching Hospital. We are pleased that 358 alumni committed $52,800 to the project. This is the third year the college’s annual fund phone and mail program has been in support of the Veterinary Teaching Hospital modernization project.

These events show that alumni and friends really care about today and tomorrow at the college. We thank each of you for your support of the college and hope that your interest and loyalty continues as strong as ever.
In Memoriam

The Iowa State University College of Veterinary Medicine wishes to express its sympathy and condolences to the families and friends of the following alumni:

1920s
Ralph E. Weber ('29),
Bancroft, Iowa.

1930s
Hugh M. Lightbody ('39),
Dalton, Ga., died March 1, 2004.

1940s
Edwin P. Taylor ('40),
Buckingham, Pa., died May 15, 2004.
Earl L. Cook ('41),
Nathaniel R. Waggoner ('41),
Silas C. Eittreim ('42),
Donald E. Sceli ('44),

1950s
William T. Rugger ('54),

1960s
Joseph F. Blass ('61),
Early, Iowa, died Nov. 28, 2003.
Charles O. Haight ('61),

1970s
John D. Roberts ('74),

1990s
Dean R. Prince ('93),
Sioux City, Iowa, died Dec. 21, 2003.

Sundberg Receives AASV Howard Dunne Memorial Award

Dr. Paul Sundberg ('81) was awarded the Howard Dunne Memorial Award by the American Association of Swine Veterinarians. The award, presented at the association's annual meeting in Des Moines, recognizes an AASV member who has made important contributions and provided outstanding service to the association and the swine industry.

Dr. Sundberg is the vice president of science and technology for the National Pork Board, where he has worked since 2001. Prior to that, he was assistant vice president of veterinary issues for the National Pork Producers Council. Before joining the NPPC in 1994, he was a faculty member at Iowa State University. From 1981 to 1990, Dr. Sundberg was a private practitioner and practice owner in Madison, Neb.

Active in the U.S. pork industry for over 10 years, Dr. Sundberg has contributed to the development of the industry's animal welfare program. His recent project involves the ISU Alums Elected to AASV Board

Drs. Pat Halbur ('86) and Ron Brodersen ('79) were elected to the board of directors of the American Association of Swine Veterinarians. Both were in election races against incumbents.

Dr. Halbur, associate professor of veterinary diagnostic and production animal medicine at Iowa State University, will represent district 6 (Iowa). Dr. Brodersen, a swine practitioner at the Whole Hog Health Center in Hartington, Neb., will represent district 8 (Nebraska and South Dakota). They began their three-year terms at the conclusion of the 2004 AASV annual meeting held March 6-9 in Des Moines. Both are eligible for re-election in 2007.

Sioux Falls Veterinarian Honored

For the past 15 years, Dr. Keith Schonewill ('80), Sioux Falls, S.D., residents Dan and Carol Everetts' by inducting him into the Morris Animal Foundation's Veterinary Honor Roll.

Donors nominate honorees by contributing $4,000 to each recipient. To date, 181 veterinary professionals have been inducted into the honor roll.

"I am proud that clients with such a long history, the Everetts told me, "I have tried to provide compassion and compassionate. The Everetts' gift in my name has been a tremendous honor."

Dr. Schonewill is a small animal practitioner at the Sioux Falls Veterinary Hospital.
The implementation of the Swine Welfare Assurance Program, the industry's standard for assessing swine welfare on the farm.

Dr. Sundberg contributes his expertise on the use of antibiotics in food animals and its impact on human health at meetings of the World Health Organization. He is a frequent speaker at U.S. and international meetings for livestock producers and veterinarians.

Dr. Sundberg received a doctoral degree in veterinary microbiology with a specialty in preventive medicine (1987) and his veterinary degree (1981) from Iowa State University. He is board-certified in the American College of Veterinary Preventive Medicine and is serving as the president of the college.

**FAST FACTS at Vet Med**

Largest building on campus: Veterinary Medicine Complex.

Smallest building on campus: Building 8 at Veterinary Medical Research Institute.

The veterinary medicine complex at Iowa State University can boast having the smallest and largest buildings on campus. The largest building on campus is the Veterinary Medicine building at 444,778 square feet. The smallest building is VMRI building 8, at 576 square feet.

**Memorial Award**

Implementation of the Swine Welfare Assurance Program, the industry’s standard for assessing swine welfare on the farm.

**Dr. Richard Schonewill Inducted into Morris Memorial Award**

Jim (’83), has provided excellent care for Sioux pets. The Everett’s honored Dr. Schonewill induction’s Veterinary Honor Roll.

$500 or more to the foundation on behalf of professionals have been inducted into Morris

The story of my care would recognize me in this provide care that is knowledgeable, consistent name would seem to confirm that I have

at Christensen Pet Clinic in Sioux Falls.
Dr. Eugene and Linda Lloyd kicked off the $47 million renovation of the university’s Veterinary Teaching Hospital with a $3.5 million gift. The gift is the largest ever to Iowa State University’s College of Veterinary Medicine. Over 140 alumni, faculty, staff and students attended a reception honoring the Lloyds on May 20, 2004.

“We wanted to help establish the hospital as a premier environment for the study and practice of modern veterinary medicine,” Dr. Lloyd said. “I benefited so much from my experience at ISU and now I hope we will be able to enrich the lives and careers of future students and for animal owners.”

“Students and patients will be the ultimate beneficiaries of this gift,” said Dr. Norman Cheville, dean of the veterinary college. “We are grateful to the generosity of Linda and Gene Lloyd.”

Construction and renovation of the veterinary teaching hospital is expected to begin in 2005. The college plans to raise $7 million in private support. The remainder will come from bonding, approved this spring by the Iowa Legislature.

The three-phase renovation and expansion of the hospital will include reconstruction of the large animal hospital wards and the Veterinary Diagnostic Laboratory, a new small animal clinic addition, a new equine clinic addition and a new entry and business office.

When completed, the renovated VTH will be named the Dr. Eugene and Linda Lloyd Veterinary Teaching Hospital, in honor of the lead private donors on the project.

Dr. Lloyd received a degree from Iowa State in veterinary medicine in 1949 and a PhD in veterinary pathology in 1970. He was a faculty member at the college for ten years. Dr. Lloyd is the founder and CEO of Lloyd
Inc., a company in Shenandoah, Iowa, that develops and manufactures pharmaceutical and nutritional products for animals and humans.

Dr. Lloyd, a longtime supporter of the college, is a member of the college’s Endowment Advisory Committee. In 1993, the Lloyds contributed $250,000 to create an endowed professorship in veterinary toxicology at the college. The Lloyds are also members of the Order of the Knoll, and Dr. Lloyd is a governor of the ISU Foundation.

He and his wife, Linda, live in Fort Myers, Fla.

The formal program for the gift announcement included the following speakers (from left): Dean Norman Cheville; Dr. Mary Ann Nieves, Director of the VTH; and John Shepard (VM-4).
A $3.2 million upgrade to Iowa State University's Veterinary Diagnostic Laboratory was dedicated June 10, 2004. The staff at the VDL performs more than one million tests and manages more than 50,000 cases each year. A critical function of the laboratory is to work with the USDA in the early detection of foreign animal diseases, such as foot-and-mouth disease and avian influenza.

The new 4,000-square-foot biosecurity unit provides a secure necropsy and Biosecurity Level Three-capable laboratory where suspect diseases can be contained for identification or characterization. “The biosecurity unit provides enhanced safety, security and diagnostic services to livestock producers and animal owners in Iowa,” said Dr. Gary Osweiler, director of the VDL.

From left to right: ISU President Gregory Geoffroy, VDL Director Dr. Gary Osweiler, Dean Norman Cheville, and Iowa Department of Agriculture and Land Stewardship Deputy Secretary Brent Halling during the ribbon-cutting ceremony at the college’s VDL.

Staff at the VDL hosted tours of the facility for guests at the dedication.