



gentle
Doctor

Summer 2007 · Volume 21, No. 2

**Interview with
Dr. Lisa Nolan**

*Build It and
They Will Come*

*Cotton Ropes, Pork
Chops, and Gators*

*\$1 Million
Challenge Grant*

IOWA STATE UNIVERSITY
College of Veterinary Medicine

Contents

Summer 2007

Features:

- 6 **\$1 Million Challenge Grant**
- 7 **An MRI of Their Own**
- 8 **Q & A with Dr. Lisa Nolan**
- 10 **Cotton Ropes, Pork Chops, and Gators ...
Oh my!**
- 12 **Build It and They Will Come**

In Every Issue:

- 3 **Message from the Dean**
- 16 **News**
- 21 **In Memoriam**

Good to the last grain.

Photo/Tracy Ann Raef

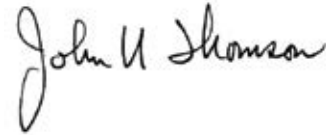
Vision in Action: Expansion Plan for 2005–2011 continued

Faculty. We have created and filled eight new faculty positions since 2005 and plan to fill a total of 30 additional new positions by 2010. One example of our targeted growth is development of the Food Supply Veterinary Services unit of the Department of Veterinary Diagnostic and Production Animal Medicine. Our goal is to build a pre-eminent program, and we are well on our way with new faculty in dairy, swine, beef, and small ruminant production medicine. You can read more about this exciting effort in this issue. We are in the initial stages of a similar initiative in our clinical areas.

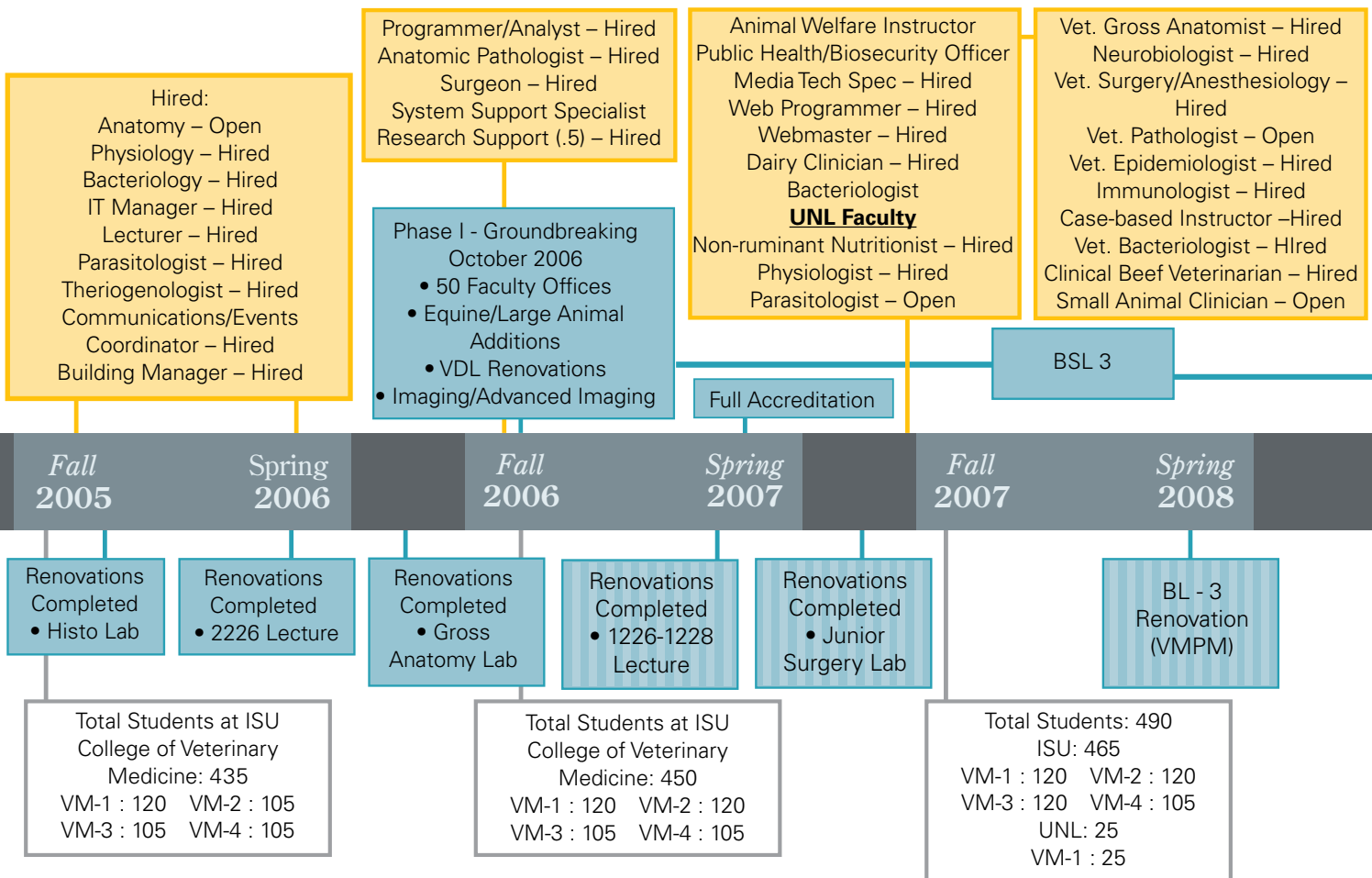
Building. The new Lloyd Veterinary Teaching Hospital is taking shape. This project paves the way for growth in student numbers and in the clinical and hospital caseloads that are critical to providing a sound education. Phase 2 will more than double the small animal hospital.

Thanks to the support of the Iowa legislature; Board of Regents, State of Iowa; and the university administration, we are developing the financial strength needed to accomplish the goals represented on the timeline – and join the top five colleges of veterinary medicine. With your ongoing support

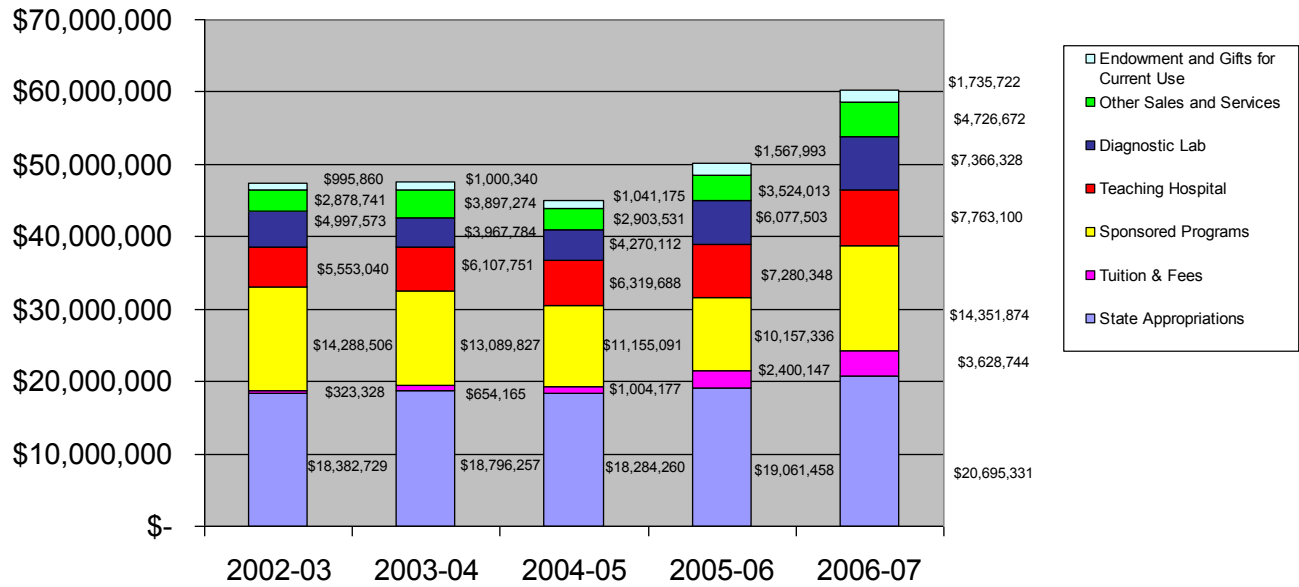
and involvement, our vision is in action and becoming reality. Thank you!



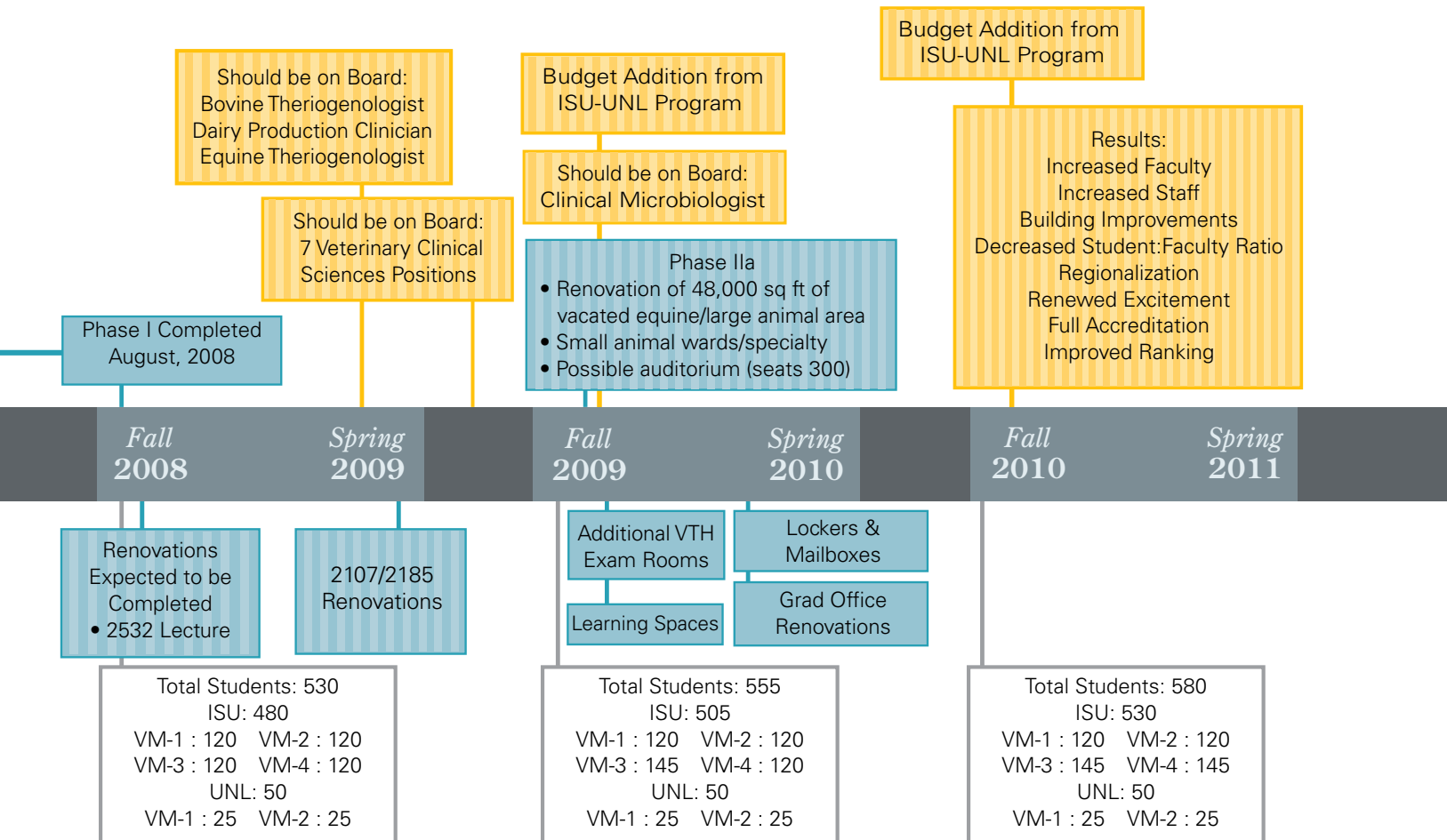
John U. Thomson, DVM, MS
Dean, College of Veterinary Medicine



CVM Revenues



*State Appropriations end of year totals on this graph will differ from beginning of the year allocations on Quality Transformation Graph
 *Sponsored Programs=Actual receipts-not awarded amounts
 *06-07 Endowment and Gifts for Current Use estimated





COLLEGE RECEIVES APPROVAL FOR \$1 MILLION CHALLENGE GRANT

The Kresge Foundation has approved a \$1 million challenge grant toward the renovation and expansion of the Dr. W. Eugene and Linda Lloyd Veterinary Teaching Hospital project at the College of Veterinary Medicine.

The “challenge” part of the grant is that the college will receive the \$1 million from The Kresge Foundation, designated to the Lloyd Teaching Hospital expansion program, only if overall college fundraising efforts raise \$4.57 million by June 2008. Qualified gifts and commitments received by the college between now and the campaign end date apply toward the challenge, whether they are designated for the hospital project, scholarships, professorships, or another use.

Headquartered in Detroit, Michigan, The Kresge Foundation was established in 1924 by Sebastian S. Kresge and is a national foundation with \$3 billion in assets. The Capital Challenge Grants

program is intended to help nonprofit organizations at the midpoint of facility construction develop a sustainable base of private donors and enhance fundraising efforts.

The college and the ISU Foundation submitted a proposal in 2006 outlining how the challenge grant program would support college growth and funding initiatives, and its efforts to build the profession through the Lloyd Teaching Hospital expansion and renovation program. Highlighted, too, was a description of how the grant would impact and help increase private support for the college.

In an approval letter sent to ISU President Gregory Geoffroy, The Kresge Foundation said, “We are pleased to support your organization and the strategic opportunity presented by your capital campaign to expand your private donor base. The new Veterinary Teaching Hospital serves as an exciting centerpiece of the college’s

first campaign and will be instrumental in supporting your plans to increase enrollment and build the field of veterinary medicine.”

“This is an outstanding opportunity for the college and Iowa State University,” said Dr. John U. Thomson, dean of the College of Veterinary Medicine. “Being approved for The Kresge Foundation challenge grant through its highly competitive selection process is an honor, and an endorsement for our plan to grow and enhance our professional program.”

If you would like to learn more about the Kresge grant and opportunities to support the challenge, contact Jeff Spielman, senior director of development (515-294-8562, spielman@iastate.edu) or Shane Jacobson, director of development (515-294-4675, shanej@iastate.edu).

An MRI of Their Own

A new \$1.5 million magnetic resonance imaging (MRI) system was installed this winter in the Dr. W. Eugene and Linda Lloyd Veterinary Teaching Hospital at Iowa State University. The General Electric 1.5 Tesla machine is housed in a specially constructed building. Previously, the only option for MRI scans for patients was at Mary Greeley Hospital's imaging facility in Ames. Now, pets have access to their own machine.

Having an on-site MRI is a win-win for our veterinary specialists, our clients and their pets. For our veterinary specialists, it's an additional diagnostic tool. For clients, it's more convenient than transporting their pets to Mary Greeley, where oftentimes, an appointment would be cancelled to accommodate a human emergency at the hospital.

An on-site MRI was a welcome addition for Dr. Karen Kline, board-certified veterinary neurologist. For patients who may have a neurological disorder, time is of the essence. "With the on-site MRI, we can obtain answers faster, which can often make the difference in obtaining a positive treatment outcome," Dr. Kline said.

"MRIs are the best imaging option for soft tissues of the body, especially



Drs. Karen Kline, veterinary neurologist, and Jennifer Parkes, neurology resident, examine MRI scans of a dog's brain. Photo/Tracy Ann Raef

in cases of neurological disorders, musculoskeletal problems and cancers," said Dr. Kristina Miles, board-certified radiologist at the VTH. "The images are precise and clear, which is a tremendous tool for specialists when diagnosing a problem."

The precise images that the MRI scans provide are especially useful for diagnosing diseases of the brain and spinal cord, says Dr. Kline. "An MRI scan can help us determine whether a patient has a brain tumor, inflammation of the brain such as meningitis or a vascular accident. Spinal cord diseases such as intervertebral disk rupture, tumors and vascular accidents also can be visualized using the MRI," Dr. Kline said.

To get those detailed images, patients are anesthetized so they remain still. The patients are monitored by our board-certified anesthesiologists during the procedure. The scans are performed by veterinary technologists who have been trained and certified to use the MRI. Board-certified radiologists read and evaluate the scans. An MRI session to view the brain takes about 60 to 90 minutes, while a session to view the spine may take 90 to 120 minutes.

"Without a doubt, the MRI has made our standard of care much higher and makes the VTH stand out as a center of excellence," Dr. Kline said.

Appointment Information

Patients must be evaluated through the orthopedic, neurology, and internal medicine specialties at the VTH prior to scheduling an appointment for an MRI.

What is an MRI?

MRIs use magnetism, radio waves and computers to produce detailed images of the internal structure of the body. At the heart of the machine is the circular magnet that surrounds the patient, creating a strong magnetic field. It's this magnetic field, the strength of which is termed "tesla," combined with radio waves that create the image. Most MRIs for clinical purposes have a 1.5 Tesla magnet.



*Images from the VTH's newly installed MRI
Photo/Tracy Ann Raef*

Q&A

An interview with Dr. Lisa Nolan

Photo/Tracy Ann Raef



Q. What attracted you to science and veterinary medicine?

I was naïve about careers when I was in college. I didn't even know what a biologist did; I just wanted to be one. I liked science and studying living things. So, I got a B.S. in biology.

When I was in graduate school, my parents bought a farm and I moved on the farm to take care of it. There was a mixed animal practitioner down the road who would stop by to pick me up when he needed help working cattle or holding horses. I thought it was a blast. That's when I got attracted to veterinary medicine and thought it would be a wonderful career, and it has been.

Q. How did you choose a career as a veterinary researcher?

When I entered veterinary school, I didn't have a clue how broad the job of being a veterinarian was. All I knew was that I was going to be a small animal practitioner.

During my first year of veterinary school, I entered a program much like today's Merck Scholars program. In the program, we visited research institutions, pharmaceutical companies, and the U.S. Centers for Disease Prevention and Control. We visited the CDC during the one day of the year that the BL4 lab was down for maintenance, and we toured it. We also learned the huge role that veterinarians have at the CDC. That piqued my interest in a research career.

Q. Describe your research and its relevance to animal and human health.

In our laboratory, we study bacterial diseases of animals. By better understanding the disease process, we hope to find ways to prevent or control disease. Our particular focus is poultry diseases, mostly those caused by avian pathogenic *Escherichia coli*. This pathogen causes avian colibacillosis, one of the largest economic disease problems in poultry. My lab group thinks that it is remarkable that our research in this area can affect the poultry producers' livelihoods, food safety and human health.

Our work has been on the animal health side, but recently we may have found a link between what we're studying and human diseases. We're exploring that now. If there is a link, we'll want to find ways to interrupt this process.

Q. Obviously, you're a devoted researcher so why did you take on administrative responsibilities?

I was very content as a faculty member. In fact, the best job in the world may be a tenured full professor. But I felt that as an administrator that I would be able to make things better for my colleagues, the profession, and society. That's very appealing to me.

Q. What do you see for the future of veterinary medicine?

We have some critical issues in veterinary medicine. One of them is the future of veterinary education. It won't stay the same. I believe that veterinary colleges need to lead these changes.

As educators, we have to be agile, not just to keep up, but to be sure we are offering the best education we can. Demands on veterinarians are going to change over time and colleges of veterinary medicine will have to change with them. I've seen a lot of change in the years that I've been a veterinarian. At Iowa State University, we've shown an ability to adapt and change with the development of the professional program with the University of Nebraska-Lincoln.

Q. What's the most satisfying aspect of your job?

It's a struggle to pick one. I would have to say it's helping others ... helping producers with their livelihood ... helping young people grow ... helping faculty do what they want to do ... and helping the college and profession move forward.

I have a pretty good job.





Dr. Lisa Nolan joined the Iowa State University faculty in 2003. She is the executive chair of the College of Veterinary Medicine, and professor and chair of the college's Department of Veterinary Microbiology and Preventive Medicine. Previously, she was a professor in the Department of Veterinary and Microbiological Sciences and director of the Great Plains Institute of Food Safety at North Dakota State University, Fargo.

She and her laboratory group study bacterial diseases that affect production animals, placing special emphasis on *Escherichia coli* (E. coli). Dr. Nolan is the author of many research publications, was the Walter F. and Verna Gehrts Presidential Professor from 2001-2003, and is the recipient of numerous teaching awards.

Dr. Nolan received doctoral and master's degrees in medical microbiology, and a DVM from the University of Georgia, Athens. She also holds a bachelor's degree in biology from Valdosta State College, Valdosta, Ga.

Next issue: Q&A
with
Dr. Anumantha
Kanthasamy.

Dr. Lisa Nolan in her laboratory with assistant scientist Yvonne Wannemuehler and undergraduate student Luke Baldwin. Photo/Tracy Ann Raef

Cotton Ropes, Pork Chops, and Gators ... Oh my!

The halls of the College of Veterinary Medicine at Iowa State are nearly empty during the summer, but that doesn't mean veterinary students aren't learning. Many students spent the summer of 2007 in a variety of experiences in the United States and around the world. In their own words, here's what they had to say about their summer.

Aleisha Nessel

Third-Year Veterinary Student

"I spent three weeks at a zoo in Palic, Serbia. During that time, I assisted in the care of various monkey species, chimps, birds, porcupines, raccoons, and reptiles. I also participated in several educational programs for Hungarian and Serbian elementary students. Occasionally I assisted in physical examinations, the most memorable of which was the alligator with an eye infection. I increased my knowledge of reptiles and birds, of which I knew very little, and learned about the similarities and differences in veterinary care between Serbia and the United States. I also learned about the Serbian educational system and I managed to pick up a few Serbian phrases."

Colin Yoder

First-Year Veterinary Student

"When applying to veterinary school I knew that I wanted to pursue a career in large animal

medicine; however, having grown up in town, my on-farm experience was limited. The college's Dairy Production Immersive Knowledge Experience (DPIKE) summer program has exposed me to the dairy industry, a facet of Iowa agriculture of which I had no previous experience. As a future veterinarian, a working knowledge of how day-to-day operations affect animal health will be vital to my success in the field. Being able to work with a variety of farmers has shown me some of the concerns they have regarding their facilities and herds, and how I will fit into this picture as a veterinarian. The hands-on experience I've gained during the program, from daily chores to vaccination programs to herd and reproductive health to sick cow treatment, are all important parts of my education which can not be gained in the traditional classroom setting. I anticipate that this experience will also result in valuable insights on the material covered in school which I may have otherwise not had."

Linda Lewiston

Third-Year Veterinary Student

"During the school year and this summer, I worked in the Veterinary Teaching Hospital filling prescriptions and compounding medications under the supervision of the pharmacist. I have learned the names of many drugs that are frequently prescribed to a large variety of patients. If I don't know what the medication is used to treat, I look it up in Plumb's. It definitely

made the first pharmacology class a little easier since I already knew the drug names and some of the mechanism of actions.

Before entering veterinary school, I worked part-time as an Emergency Medical Technician. I also have a teaching license, so this summer I also taught an EMT-1 class at the Des Moines Area Community College."

Justin Jensen

Third-Year Veterinary Student

"I worked for Elanco Animal Health based in Greenfield, Indiana. My job this summer consisted of shadowing a feedlot veterinarian, Dr. Jerome Biber, who oversees half a million Holstein steers in Arizona and California. My job consisted of postmortem examinations to determine the applicability of the drugs used in the feedlot along with the routine veterinary work done. We compiled data from the feedlots to create pivot tables of the death loss, response to treatment, pull rate, feed conversions, and many more. I am collecting and entering data on a Micotil/Nuflur trial. I also got to travel to Idaho, Washington, and Oregon with Dr. Biber's associate, Dr. Galen Weaver, to see how different the feedlot industry is across the United States.

I believe this job gave me insight to what a large animal practitioner has to do and the variety that he sees on an average day. It also gave me an idea of the ingenuity that is required and the time that these practitioners are willing to put into the job."

Leslie Reed, VM3, takes care of one of the marine mammals this past summer at Blank Park Zoo in Des Moines, Iowa.



Leslie Reed

Third-Year Veterinary Student

"I am the Marine Mammal Intern at the Blank Park Zoo in Des Moines. I work with the sea lions, seal and penguins by assisting the trainers/keepers with food preparation, cleaning, feeding and training sessions. During the training sessions with the marine mammals, I help desensitize the animals to things a second person, such as a veterinarian, might do. This includes bi-monthly eye exams including staining for lesions, dental exams, physical touch/palpation, ultrasound exam, and heart/lung auscultation with a stethoscope. On Thursdays, I spend the day with the zoo's consulting veterinarian, Dr. June Olds. I make rounds with her and assist her with physical exams including blood draws and vaccinations, chemical immobilizations, surgeries, re-checks and treatments on a variety of species."

Jennifer Christensen

Third-Year Veterinary Student

“My summer externship at the National Pork Board has been an amazing opportunity to appreciate swine health from a much broader perspective. The exposure to nationwide swine health issues that the National Pork Board has provided will undoubtedly prove to be invaluable as I pursue a career in production animal medicine.

Overall, the experience has involved exposure to the development and initiation of the Swine ID Plan, an appreciation for PRRS research advancements, implementation of state Swine Health Networks for swine health surveillance purposes, development of a youth swine exhibitor biosecurity guide, and an increased perception of the general efforts of the swine industry in preparation of a foreign animal disease or emergency situation.

The externship at the National Pork Board has been a challenging and exciting one that has forever changed my perspective of swine health and production animal medicine.”



Jennifer Christensen, VM3, outside the headquarters of the National Pork Board where she spent the summer as an animal health extern. Photo/NPB

Pat Hoffmann

Second-Year Veterinary Student

“A component of my summer externship with Murphy-Brown, LLC, involved a research project testing the use of oral fluids to monitor swine herd health. My part of the project was to implement this new technique in a commercial setting. We are collecting oral fluid from 12,000 pigs every two weeks during the grow-out phase using cotton ropes. The oral fluid will be tested for swine influenza, *Mycoplasma hyopneumoniae*, porcine circovirus type 2, and porcine reproductive and respiratory syndrome virus at the end of the collection period.

I believe this technique can be an important new tool for monitoring herd health at a barn level. Monitoring pig health is increasingly important as the swine industry continues to integrate and consolidate. Oral fluid collection is simple and can be done by anyone, whereas bleeding pigs takes training.

Being involved with this project has given me an appreciation for the time and effort it takes to get valuable data while doing research – something I did not think I would be in. There are actually a lot of people involved in this large field project and helping me with its implementation. I have learned a lot about the importance of surrounding yourself with the right people.”

Rik Smith

Third-Year Veterinary Student

“I spent a month at Cactus Feeders in Texas and a month at Hitch Feeders in Guymon, Okla. At Cactus, I helped

process cattle, treat sick cattle, did necropsies on cattle and rode pens. Both experiences were a great opportunity to see different aspects of feedlots and the role of the veterinarian.”

Cameron Dow

Third-Year Veterinary Student

“The American Veterinary Medical Association Governmental Relations Division (AVMA-GRD) externship provided the ultimate experience for an inside-the-beltway perspective. As a 30-day extern, I was immediately set into action to act as a lobbyist for animal and agricultural issues facing federal legislation. This required me to meet with senators, congressmen and their staffs developing key relationships to pursue and execute the AVMA agenda. The experience enlightened me on how our federal government operates, the myriad of roles that veterinarians can serve in multiple organizations and the potential influence and energy that veterinarians can contribute to the legislative process (from both governmental and private sector consulting positions).

My experience at the AVMA-GRD has been phenomenal, a journey so extraordinary it remains almost ineffable. I came to Washington as an idealist and leave not disillusioned, but rather empowered and emboldened in my vision. The AVMA-GRD externship has been the ultimate experience outside of the traditional practice of veterinary medicine and I strongly recommend it to all veterinary students interested in exploring the vast opportunities a doctor of veterinary medicine degree provides.”

Cameron Dow (VM3) visits with his friend U.S. Congressman Rick Renzi (R-AZ) during his AVMA externship.





BUILD It and They *Will* COME

It worked for Kevin Costner in the 1989 movie *Field of Dreams*. And it also worked for the Food Supply Veterinary Services (FSVS) unit at Iowa State's College of Veterinary Medicine. Build a production animal program and the students will come ... and they have.

Veterinary students are quick to credit the college's administration and production animal medicine faculty members for drawing students to the program. "Faculty members have an infectious attitude and a passion for helping students to learn," said Jenn Christensen (VM3). "That attitude has translated into so many good things for students."

The renewed interest and commitment to production animal medicine has resulted in a tremendous growth in faculty numbers and courses. That's good news for students like Rik Smith (VM3), who plans to practice food animal medicine when he graduates. "If you want to be in production animal medicine, you need to be more than a veterinary medical consultant," Smith said. "You need to have an understanding of the business and how it works."

"A lot of education happens seeing practitioners on the job and hearing them talk about what they do," Chris-

tensen said. And, that is where college faculty members go above and beyond to create and develop opportunities for students outside the classroom. The professional program at Nebraska is an innovative idea that has added another dimension to the curriculum in terms of facilities and experiences, Smith said.

Best of all, says Smith, faculty members are seeking input from students and implementing changes to make the program an optimal learning experience inside and outside the classroom. "That's awesome."

"I'm really amazed at the enthusiasm and synergy of the individual groups within the unit (dairy, swine, beef and small ruminant)," said Dr. Jim West, director of the FSVS. The swine group has developed a national level of recognition and the dairy and beef sections are getting closer to that level, said Dr. West. "An exciting addition to the Food Supply Veterinary Services unit is the small ruminant group. Iowa is experiencing very rapid growth in sheep numbers as well as both meat and dairy goats. We are fortunate to have recruited two veterinarians so well prepared to provide service to this segment of Iowa's animal industry."

One size doesn't fit all

Over the past few years, the FSVS has built a comprehensive program. Besides the broad range of species covered, students can choose courses, programs, and internships that raise and enhance their current experience level.

A popular program for students, regardless of experience level, has been the Swine (SPIKE) and Dairy (DPIKE) Production Immersive Knowledge Experiences. Students spend the summer learning the dairy or swine industry from the ground up, an invaluable opportunity for hands-on learning. Next year, a beef production summer program will be offered, modeled after the successful SPIKE and DPIKE programs.

Another new course that has become popular is the Food Animal Clinical Foundations Course. It's a week-long intensive production animal medicine course at the Great Plains in Nebraska where students split time between ISU and the Great Plains Veterinary Education Center. The course is offered twice in the summer to accommodate the increased student interest in food animal medicine. "Many of the students who take the course are first- and second-year students, equally split between food animal oriented and companion animal oriented students," Dr. Terry Engelken, beef clinician, said.

Within each food animal practitioner lies the mind of an epidemiologist

Veterinary epidemiologists are concerned with diseases in populations of animals. They investigate the sources of disease and how to eliminate or control it. These activities, said Dr. Annette O'Connor, are not unlike the ones practiced every day by food animal veterinarians.

"Practitioners use epidemiology ev-

ery time they step onto a farm," said Dr. O'Connor, epidemiologist in the Food Supply Veterinary Services unit. "Showing in/out is a biosecurity practice that veterinarians use based on the idea that there are risk factors for disease transmission," Dr. O'Connor explains.

Although specific courses in epidemiology are taught at the graduate level,

veterinary students at Iowa State are exposed to principles of epidemiology and its application in many courses, including the veterinary diagnostic laboratory rotation, production medicine courses and production records analysis courses. "For example, we teach students how to design a herd health monitoring program," said Dr. Alex Ramirez, veterinary

It takes a village

Veterinarians in the field are an integral part of the curriculum at Iowa State. “We can’t teach all of the day-to-day tasks that a graduate veterinarian needs to know,” Dr. West said. “That’s where our preceptorships are invaluable to that process.”

The preceptorship program has undergone a dramatic transformation, unrecognizable from years past, says Dr. Locke Karriker, assistant professor of food supply veterinary medicine. “We can quantify the student’s experience and demonstrate its support of the curriculum’s objectives.”

Is there a future

The college’s biggest strength, says Dr. West, is that we have more students interested in food animal medicine than any other veterinary school. “We have a lot of students who come to Iowa State not knowing that they are interested in food animal medicine, but they leave school as mixed animal practitioners,” Dr. West said.

But will jobs in food animal medicine be available for all those students? “There will always be jobs for food animal veterinarians,” Dr. West said. “I recently attended an Iowa Veterinary Medical Association committee meeting and over half of the veterinarians in the committee will be hiring in the next two years. That same hiring trend for food supply veterinarians can be found across the United States.”

Adaptability is the key component in the lifecycle of the profession, says Dr. West. “Many pundits predicted the demise of veterinary medicine when tractors replaced the work horse; instead, the profession thrived,” Dr. West said. “Most of my career has been spent in the field of embryo transfer; yet, when I graduated, this procedure was considered to have little practical application. With biosecurity needs and public health concerns over diseases, there are unimaginable opportunities that haven’t surfaced yet, but will.”

specialist in the FSVS unit. “We tell students that they need to first decide what they want to know so they can work backwards to find the answers to how many animals should be sampled.”

“The professional curriculum emphasizes the technical skills that students need,” Dr. O’Connor said. “Those skills will get veterinarians on the farm, but they won’t stay on the farm unless they can analyze herd-level data. Those

basic data analysis skills are expected by the livestock producer. Our courses give students the opportunity to develop some of those skills and that’s a unique aspect of the professional curriculum at Iowa State.”

Veterinarians specifically trained in epidemiology study the big picture of population medicine to help policy makers answer public health questions and determine the impact of policy and

regulatory decisions, said Dr. Scott Hurd, epidemiologist at FSVS. “Whereas the veterinarian uses epidemiology at the herd level, epidemiologists also use their training more broadly in food supply veterinary medicine, both with a goal of protecting the health of the animals and keeping the food supply safe and wholesome.”



Dairy Group: From left, Drs. Danelle Bickett-Weddle, Leo Timms, Pat Gorden, Bruce Leuschen, Karl Kersting, Jim West, Steve Hopkins, and Jim Thompson (unavailable for photo).



Small Ruminant Group: Drs. Paul and Cassandra Plummer



Beef Group: Drs. Terry Engelken, Steve Ensley, Annette O’Connor; Back row, Drs. Shaun Sweiger and Vickie Cooper



Swine Group: From left, Drs. Kent Schwartz, Locke Karriker, Butch Baker, Derald Holtkamp, Alex Ramirez, and Jim McKean (Not available for photo: Dr. Hank Harris)

Photo/Tracy Ann Raef

In the next issue
of Gentle
Doctor: Outreach
and the FSVS



ISU Scientist Posts Results for KENTUCKY DERBY

In the race to curb illegal drug use in Kentucky's thoroughbred horses, Walter Hyde, PhD, races the clock to provide testing results for the world's most-recognized horse race, the Kentucky Derby.

When the Kentucky Horse Racing Authority decided to conduct a pre-race test for illegal substances of all horses entered in the 2007 Kentucky Derby, Dr. Hyde was consulted. "The pre-race test was a bold move for us," said Lisa Underwood, executive director of the Kentucky Horse Racing Commission. "Dr. Hyde helped us decide when the pre-race testing should be conducted."

On Wednesday before the Saturday race, blood samples were taken by the commission's veterinarians and sent to the college's racing chemistry department. "Dr. Hyde had the results back to us on Friday, which was great, so we were able to announce that all horses were clean for erythropoietin, or EPO, and darbepoietin." The pre-race screening was the first in the history of the Kentucky Derby. Horses racing in the Derby also undergo additional testing on race day, Ms. Underwood said.

Since 2000, the racing chemistry department at Iowa State University's Veterinary Diagnostic Laboratory has held the equine testing contract for the state of Kentucky. As part of the contract, Dr. Hyde, director of the racing chemistry department, and his team conduct the equine testing for all of the race tracks in Kentucky.

Prior to 2000, the equine testing for Kentucky was done using the classical method of testing using thin-layer chromatography. "When we bid on the testing contract in 2000, we offered an alternative, "super testing" involving

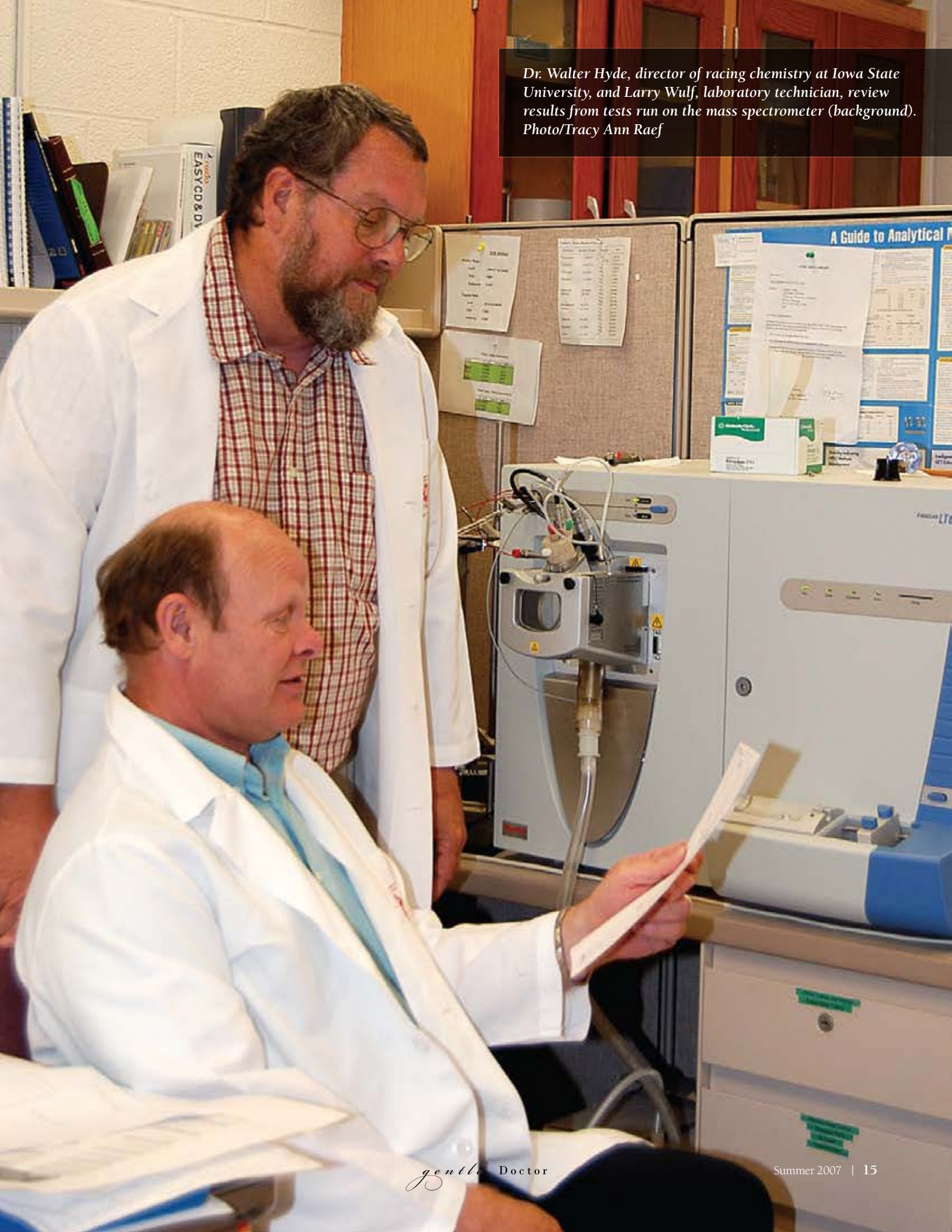
instrumental screening and immunoassay screening," said Dr. Hyde. "Previously laboratories used thin-layer chromatography to declare a sample suspicious, and then they apply a mass spectrometry or high-performance liquid chromatography test to confirm it. We decided to apply the confirmatory techniques to the screening phase."

Equine post-race testing is a critical component to protect the integrity of the horse racing industry. "There are always exotic drugs out there that we need to look out for, so the testing procedures will be an ever-evolving process," Ms. Underwood said.

Being a step ahead is the norm for the team at the racing chemistry laboratory, which is part of the college's Veterinary Diagnostic Laboratory. It's one of the few laboratories in the country that does testing to the specifications of the Thoroughbred Owners and Breeders Association.

With over 30,000 samples tested a year, the racing chemistry department has an experienced team to help the racing industry stay ahead of illegal drug use. "Our duty is to detect, identify, confirm and report illegal drug use," Dr. Hyde said. "We try very hard to stay relevant to the science needed for this task, to stay current with the challenges. Certainly the College of Veterinary Medicine and the Veterinary Diagnostic Laboratory are an ideal place to pursue this, as both fully support a blend of service and research as being necessary to productive programs."

Dr. Walter Hyde, director of racing chemistry at Iowa State University, and Larry Wulf, laboratory technician, review results from tests run on the mass spectrometer (background). Photo/Tracy Ann Raef



Caston Earns Diplomate Status

Dr. Stephanie Caston, an equine surgery clinician in the college's department of veterinary clinical sciences, successfully completed board certification requirements of the American College of Veterinary Surgeons in February 2007. She completed her internship and residency programs at Iowa State University. Dr. Caston is a 2002 graduate of Texas A&M University College of Veterinary Medicine.

Dr. Caston is a member of the American Association of Equine Practitioners, and faculty advisor for the college's student AAEP chapter. She is a frequent speaker at veterinary and horse owner workshops and seminars.

There are a total of 1,294 ACVS board-certified veterinary surgeons in the United States.



Dr. Stephanie Caston, DACVS, with a patient in the Veterinary Teaching Hospital. Photo/Tracy Ann Raef

Baker Elected Vice President of AASV

Dr. Rodney "Butch" Baker, Ames, Iowa, became vice president of the American Association of Swine Veterinarians during the association's annual meeting in Orlando, Fla. Dr. Baker is a senior clinician in the Food Supply Veterinary Services Unit at Iowa State University's College of Veterinary Medicine.

"Dr. Baker has always been a willing volunteer for the AASV and his election to the vice presidency is a nice progression into a larger leadership role," said Dr. Tom Burkgren, executive director

of the AASV. "His background in practice, industry and academia will really benefit the AASV."

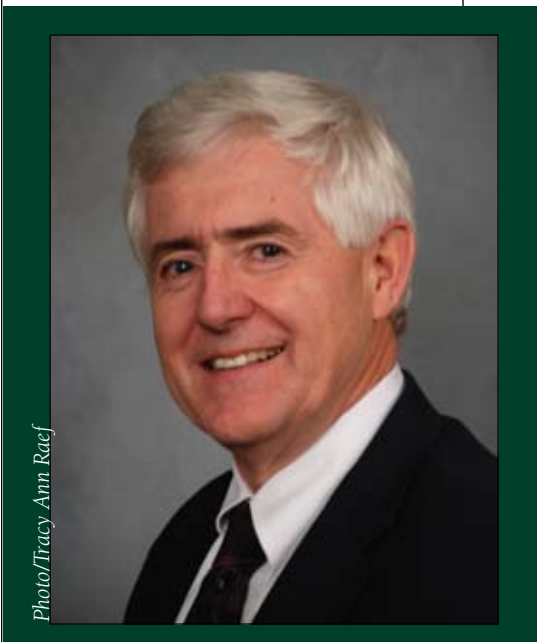
A member of the AASV since he graduated from veterinary college, Dr. Baker credits the association's educational opportunities and mentoring as the most rewarding aspects of his 28-year career in veterinary medicine. "The friendships, camaraderie, and the scientific knowledge I gained through AASV have molded my professional life," Dr. Baker said.

As a member, Dr. Baker represented the AASV on the National Board of Veterinary Medical Examiners for nine years. He chairs the AASV's Professional Development Committee, and is a member of the association's Food Safety, North American PRRS Eradication Task Force, PCVAD Ad Hoc Committee, and Collegiate Activities Committee. He is serving on committees of the National Pork Board, and has served on committees of the National Pork Producers Council, the American Veterinary Medical Association, and other industry committees and task

forces at the state and national level.

Dr. Baker grew up on a diversified farm in north central Kentucky, raising cattle and pigs, crops and tobacco. Dr. Baker's career in veterinary medicine began as a mixed animal practitioner in Kentucky. After 17 years in private practice, he spent a year in the animal health industry, four years with a pig breeding-stock company and three years as director of health assurance in a large integrated pork production company.

He received his veterinary degree from Auburn University in 1978 and his master's degree in 1999 from Iowa State University. He is a 1995 graduate of the University of Illinois' Executive Veterinary Program Certificate in Swine Health Management. In 2000, he earned a global business management certificate from the Belmont University Center for Professional Development, Nashville, Tenn.



Photo/Tracy Ann Raef

Holly Bender Receives the Sesquicentennial Hubbard Award

The Sesquicentennial Hubbard Award in the amount of \$18,000 was awarded to Dr. Holly Bender, associate professor of veterinary pathology at the College of Veterinary Medicine. The Hubbard Award recognizes an Iowa State faculty member for teaching excellence.

A recognized expert in veterinary clinical pathology and in student learning, Dr. Bender has won numerous teaching awards, including the highest national awards in the teaching of veterinary medicine. She developed and implemented the Diagnostic Pathfinder, a Web-based case analysis tool that helps students learn the reasoning and analytic skills essential for professional success. Her teaching is built around team-based learning practices, which allow students to develop skills in solving complex problems while working both individually and as members of a

team. She uses the Diagnostic Pathfinder, personal response (“clicker”) technology, and other classroom technology to present increasingly complex cases in reasoning with laboratory data. A graduate of Michigan State University with a doctorate from Virginia Tech, Dr. Bender came to Iowa State in 2002.



File Photo

Class of 2011 Profile

Total Class: 146

Age: Mean: 24.7
Range: 21-37

Gender: Males: 33 (24%)
Females: 112 (76%)

Degrees: None: 3
Bachelor's: 136
Master's: 7

Cumu. GPA: Mean: 3.56
Range: 2.92-4.00

Last 45 GPA: Mean: 3.61
Range: 2.87-4.00

GRE: Verbal Mean: 490
Quan. Mean: 640
Analytical Writing
Mean: 4.5

College Promotions

Dr. Al Jergens to professor (already tenured) in Veterinary Clinical Sciences

Dr. Nancy Cornick to associate professor (with tenure) in Veterinary Microbiology and Preventive Medicine

Dr. Radford Davis to associate professor (with tenure) in Veterinary Microbiology and Preventive Medicine

Dr. Richard Evans to associate professor (with tenure) in Veterinary Diagnostic and Production Animal Medicine

Dr. Annette O'Connor to associate professor (with tenure) in Veterinary Diagnostic and Production Animal Medicine

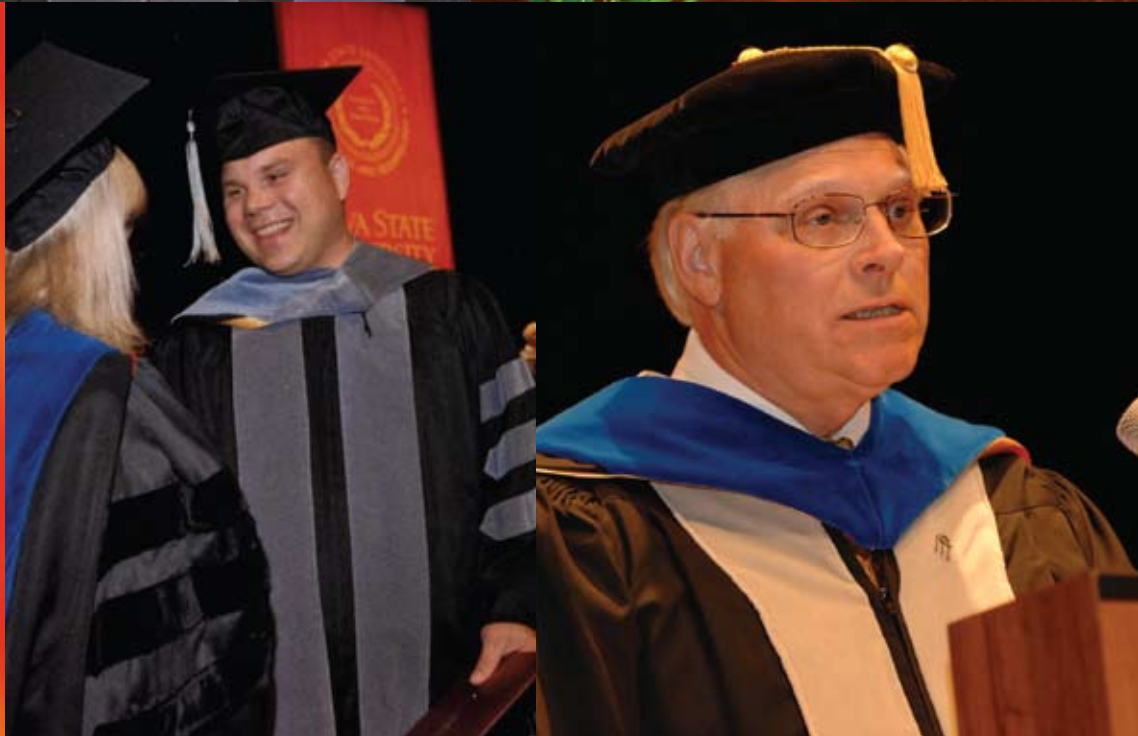


From left: Drs. Nancy Cornick, Al Jergens, Annette O'Connor, and Rich Evans. Not available for photo: Dr. Radford Davis. Photo/Tracy Ann Raef

GRADUATION



Ninety-seven new doctors of veterinary medicine graduated from Iowa State University on May 5, 2007, bringing the total number of college alumni to over 6,000. The 2007 commencement speaker was Dr. Ken Prasse ('65), former dean of the College of Veterinary Medicine at the University of Georgia. Dr. Fred Sick ('74), president of the Iowa Veterinary Medical Association, administered the Veterinarian's Oath to the graduates. The reciting of the oath is a time-honored practice to remind the newly conferred doctors of their obligations.





Photos/Jolesch Photography

Congratulations Class of 2007!



Stock Photo

Leadership Award Named for Dr. John Melcher

The Association of American Veterinary Medical Colleges (AAVMC) announced that it has established the Senator John Melcher, DVM, Leadership in Public Policy Award. The association presented the first award to the person for whom it was named, Dr. John Melcher. The award was presented at the association's annual meeting in March 2007.

For the past 17 years, Dr. Melcher has advocated for veterinary medicine on Capitol Hill and at the White House, said Dr. Lawrence Heider, AAVMC's executive director at the time of the award. "He has influenced every piece of federal legislation that has had an impact on veterinarians over the past 38 years," Dr. Heider said.

Dr. Melcher was first elected to the U.S. House of Representatives from

Montana in 1969. He was re-elected for three succeeding terms and served in the House until January 1977. He was elected to the U.S. Senate in 1976 and served in that office until 1989. After his retirement, Dr. Melcher established a consulting firm. His knowledge of how public policy is developed and his expertise in working with members of Congress and congressional staffers as well as stakeholders and coalitions has served the veterinary profession well.

Born in Sioux City, Iowa, Dr. Melcher served in World War II prior to entering veterinary college at Iowa State University. After graduation in 1950, he practiced in Montana and became an alderman in the town of Forsyth. He served as mayor of Forsyth for three terms.

Alums Receive Awards, Honors from the AASV



Photo/Tracy Ann Raef

During its March 2007 annual meeting, the American Association of Swine Veterinarians conferred awards and honors on Iowa State University College of Veterinary Medicine Alumni.

Practitioner of the Year Award

Dr. Bernie Curran ('74) was named 2007 Swine Practitioner of the Year. "Receiving recognition from my colleagues for service to the pork industry and my clients is a special and humbling honor," Dr. Curran said when he received the award prior to his death in June (see *In Memoriam*, page 21).

Dr. Curran was a partner at Scott County Animal Hospital, a four-veterinarian mixed practice in Eldridge, Iowa. Dr. Curran was active in the AASV since 1974, serving in

many leadership roles, including as president in 1986. On the national level, he served as the food animal medicine consultant on the U.S. Food and Drug Administration's Veterinary Medicine Advisory Committee. He also represented the association on committees and task forces of the American Veterinary Medical Association. In 1999, he received the AASV Meritorious Service Award.

Dr. Curran's devotion to advancing the Iowa pork industry was recognized in 1989 when he was named Honorary Master Pork Producer by the Iowa Pork Producers Association. He was very involved with pseudorabies eradication in Iowa, and served as co-chair of the advisory committee.

Howard Dunne Memorial Lecture

Dr. Tom Burkgren, MBA ('80), was selected to present the Howard Dunne Lecture during the AASV annual meeting. The lecture is named for Dr. Howard W. Dunne (1913-1974), an internationally recognized authority on swine diseases and a 1941 graduate of Iowa State's College of Veterinary Medicine.

Dr. Burkgren's presentation opened the conference's general sessions that focused on the theme 'Good to Great.' Dr. Burkgren, who has served as executive director of the AASV for nine years challenged and motivated the association to exceed expectations of themselves and the industry.

Prior to joining the AASV in 1997, he was in private practice developing production medicine programs for swine producers for 12 years. From 1991 to 1997, he also taught practice

management to third- and fourth-year veterinary students at Iowa State. He was the 2000 recipient of the AASV Meritorious Service Award and 1992 Merck AGVET Creativity in Teaching Award and the 1993 Student Chapter of the AVMA Basic Science Teaching Award from Iowa State.

AASV President

Dr. Daryl Olsen ('82) was installed as the president of the AASV during the annual meeting. Since 1982, Dr. Olsen has been a swine practitioner at the Audubon-Manning Veterinary Clinic in Audubon, Iowa.

"I am excited about the opportunity to serve as president of the AASV," Dr. Olsen said. "Providing leadership to our association to meet the future challenges that our industry will face is both an honor and a responsibility that I take seriously."

*Dr. Daryl Olsen discusses plans with Dave Wittry, PhD, agronomist, in his office at Audubon-Manning Veterinary Clinic.
Photo/Tracy Ann Raef*



Fast Facts about CVM Alumni

Average Age: 51

Male: 68 percent

Female: 32 percent

Under 30 years of age: 7 percent

30-39 years of age: 19 percent

40-49 years of age: 22 percent

50-59 years of age: 24 percent

60-69 years of age: 12 percent

Over 70 years of age: 16 percent

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:

1930s

Ivan C. Frederickson ('39)

Tequesta, Fla., died Feb. 14, 2007

1940s

James R. Arnold ('45)

Iowa City, Iowa, died Apr. 28, 2007

Donald V. Benson ('45)

Fayette, Mo., died Feb. 14, 2007

Gerold E. Brandt ('40)

Marion, Iowa, died Mar. 1, 2007

John B. Herrick ('46)

Scottsdale, Ariz., died May 17, 2007

Albin J. Nelson ('43)

Nashua, Iowa, died Apr. 30, 2004

Donald W. Rawson ('43)

Cora, Wyo., died Apr. 21, 2005

Elgin S. Scobell ('49)

Wausau, Wis., died Dec. 8, 2006

Herbert G. Stoenner ('43)

Hamilton, Mont., died Mar. 2, 2007

1950s

Howard E. Bayles ('54)

Homewood, Ill., died Apr. 30, 2007

August F. Burger ('52)

Statesville, N.C., died Apr. 2, 2006

Alfred W. Cooper ('50)

Seymour, Iowa, died Mar. 2, 2007

Emmert W. Hansen ('57)

Missoula, Mont., died Feb. 8, 2007

Paul O. Nees ('55)

Roscoe, Mont., died Mar. 9, 2007

1960s

Robert I. Challoner ('60)

Oshkosh, Wis., died Jan. 31, 2007

Allan L. Trapp ('60)

Lansing, Mich., died May 15, 2007

1970s

Bernard J. Curran ('74)

Park View, Iowa, died June 18, 2007

E. Duane Lassen ('72)

Ft. Collins, Colo., died Mar. 20, 2007

Construction Update

\$60 Million Construction and Renovation Program Moving Forward

It's been an exciting summer on the college campus. More than \$60 million in new construction and building renovation projects have been in progress, ranging from the Dr. W. Eugene and Linda Lloyd Veterinary Teaching Hospital to 12 laboratory and office renovations. Key projects include:

The Lloyd Veterinary Teaching Hospital

This \$48 million project remains on schedule for fall 2008 completion. Building walls are going up, concrete decking has been poured, and the final configuration is highly visible. Advanced imaging, intensive care, surgery and isolation areas are out of the ground. The entire building, including equine wards and large animal receiving will be enclosed by winter.

Classroom Renovation

Room 1226 and 1228 lecture halls have been combined into a new, state-of-the-art classroom that seats 175. Vintage 1970s orange and gold seating has been replaced with fixed, computer-friendly tables and movable chairs. New technology, including high-speed wireless connectivity, has also been installed. (See photos below.)

Junior Surgery

Locker rooms have been removed and the surgery floor expanded by 725 square feet to provide six new surgical stations that will accommodate the increased number of students.



From the Senior Development Director's Chair

Dear Alumni and Friends,

As I prepare for my second year at the College of Veterinary Medicine, I look back on a year of transition, planning and positioning. We have been fortunate to put the right people into positions to help us grow and finally have a full team in place to move the college forward and continue the fundraising efforts of many professionals that preceded us at the college. The college is at a pivotal point in its history. We have an exciting challenge ahead and a team in place to accomplish a lot. Most important, we have supportive alumni and friends.

Our latest addition to the team is Teresa Perry. Teresa grew up on a crop and livestock farm in DeWitt, Iowa, and graduated with a bachelor of science degree in agriculture from Iowa State University. Prior to joining the

for the teaching hospital project if we are successful in raising an additional \$4.57 million by June of 2008. With your help, I know we can meet this challenge.

Fortunately most gifts to the college will qualify in the challenge. It is not limited to just gifts for the renovation project. This will allow our development staff to continue to develop a broad financial and donor program for the college that addresses all of the needs that we have identified. I continue to be amazed at the generosity and sincere heartfelt kinship of many of the college's graduates I have met this past year. I want to assure you that the gifts you are making at any level are needed and appreciated.

We have a great deal of work ahead of us but we also have a team in place to continue to move this great college forward to provide the finest veterinary

medical education possible to the students who will serve society's animal-related needs in the future. If you have any questions on how you can help move the college

forward, please contact me or our development team. And, as always, please stop by when you are in Ames. My telephone number is: (515) 294-8562, e-mail: Spielman@iastate.edu

Best regards,



Jeff Spielman

"I continue to be amazed at the generosity and sincere heartfelt kinship of many of the college's graduates I have met this past year."

staff at the college, she worked for Iowa State University Extension in south-east Iowa. Teresa will be assisting both Shane Jacobson, development director, and me with our fundraising efforts.

As you've seen in our headline on the cover, we have been approved for the Kresge Capital Challenge Grant to support the college in its efforts to renovate and expand the Dr. W. Eugene and Linda Lloyd Veterinary Teaching Hospital. Under the grant's terms, the college will receive the \$1 million grant from the Kresge Foundation designated



Photo/ISU Foundation

In an impressive way, the College of Veterinary Medicine Class of 1957 celebrates its 50-year class reunion by presenting a \$30,000 class gift to the college's director of development, Shane Jacobson. The Class of 1957 presented the gift during Iowa State University's Alumni Days, May 18, 2007, prior to a tour of the college. The class gift was designated for the Veterinary Teaching Hospital's Intensive Care Unit Receiving Area and Large Animal ICU Room. Both spaces will carry the class's name.



Photo/Kim Adams



IOWA STATE UNIVERSITY

College of Veterinary Medicine
Ames, IA 50011-1250

Return Service Requested