

A black dog with floppy ears is being examined by a veterinarian in blue scrubs. The veterinarian is using a red stethoscope on the dog's chest. The scene is set in a clinical environment with a blurred background.

gentle **Doctor**

Summer 2012 | Vol. 26 No. 1

Beyond the Classroom
Hands-on Experience and More!

New Anesthesia/Surgery Suite
Raising Standard of Care for Our Patients

Contents

Features



6 Last But Not Least



8 Let's Give Them Something to Talk About



**10 Beyond the Classroom:
Hands-on experience and so much more**



**12 ISU Veterinarian Lends Extension Expertise
in Afghanistan & Pakistan**

In Every Issue

3 Dean's Letter

13 News

15 In Memoriam



Photo/Katy Van Est

On the Cover

A puppy receives preventive care from ISU veterinary student Kristin Heilmeyer ('14) during a free veterinary clinic in South Dakota. Story on page 10.

Office of the Dean(515) 294-1250
Office of Development(515) 294-8562
Lloyd Veterinary Medical Center
 Small Animal Clinic.....(515) 294-4900
 Large Animal Clinic.....(515) 294-1500
Veterinary Diagnostic Laboratory(515) 294-1950
General College Information.....(515) 294-1242

The Gentle Doctor is published by the College of Veterinary Medicine for alumni and friends of the college.

Editor & WriterTracy Ann Raef
Graphic Design.....Ann Greazel, Rachel Tendall

We welcome your suggestions, comments, and contributions to content.

Correspondence should be sent to:
Editor, The Gentle Doctor
College of Veterinary Medicine
Iowa State University
2525 Veterinary Administration
Ames, IA 50011-1250

Telephone: (515) 294-4602
E-mail: traef@iastate.edu
Web site: www.vetmed.iastate.edu

gentle
Doctor

Summer 2012 Volume 26, No. 1

Dean's Letter

Dear alumni and friends,

I spent more hours than I care to count in airports and on airplanes during the last couple of months, traveling to Brazil and Austria. But all that travel time gave me lots of time to think about the Iowa State University College of Veterinary Medicine and the impact our college and alumni have on the veterinary medical profession. The uninterrupted time to reminisce and plan for the future is a luxury and one of my favorite perks of international travel!

On May 5, 144 members of the Class of 2012 were added to our list of alums. I was honored to be part of the graduation ceremony as our best and brightest students earned their Doctor of Veterinary Medicine degrees. Dr. Nicholas Trout, VetMB, with the Angell Animal Medical Center in Boston, kicked things off with an inspirational and very entertaining speech about the students' achievements and what the future holds. I got chills as I listened to Dr. Bill Williams, president of the Iowa Veterinary Medical Association, lead the graduates in the veterinarian's oath. Watching our new graduates become doctors is just as exciting now as it was when I received my DVM degree nearly 25 years ago. I know I speak for our faculty and staff when I say how proud we are of each and every one of them. They truly are the future of veterinary medicine, and I look forward to watching them become outstanding veterinarians or researchers, leaders, role models and professionals who make a difference in the world. The opportunities in front of them are limitless.

This issue of *Gentle Doctor* features three stories about veterinary outreach and engagement. Dr. Grant Dewell, our beef extension veterinarian, is part of an educational and training program for agriculture extension personnel in Afghanistan and Pakistan. A team of volunteer veterinarians, technicians and students from our college recently

returned from conducting a free veterinary-care clinic for members of the Crow Creek Tribal Nation. And Dr. Dan Thomson ('00) is the host of a new program on RFD-TV called *DocTalk*, on which he will lead discussions on important issues from livestock welfare to the safety of our food supply to the health of our companion animals. All of these high-profile opportunities come with tremendous responsibility and the chance to demonstrate a different type of leadership in veterinary medicine. It is very rewarding to see what our faculty, staff, students and alums are doing and the positive impact they are having on our profession around the world.

Back home, we recently welcomed Dr. Steven Leath, the new ISU president, to the college for his first of what we hope are many visits. I expect President Leath to have a big impact on our college. He is a dog lover, horseman and cattleman so he understands the value of veterinary care. He also understands that the college has old research facilities and our current infrastructure limits our ability to grow our research capacity, attract top-tier researchers and be a leader in research funding among CVMs. President Leath is leading an initiative for strategic research hires across campus, which should build the university's and college's competitiveness for additional funding, in particular from the National Institutes of Health. He has charged the colleges at Iowa State with building a self-sustaining research pipeline, so we are in the process of developing a plan for strategic CVM research hires. It is very exciting to think about our potential for growth in our core areas of strength and how this could open doors for new areas of strength within our college, too.

Another area that should help improve our competitiveness for new and different types of research funding is the college's

new accreditation by the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC).

We are really excited because this accreditation gives third-party credibility to our teaching and research programs and demonstrates our commitment to the highest standards of animal welfare. AAALAC's accreditation is voluntary and supplements our compliance with local, state and federal laws that regulate animal research. Most of the top NIH-funded institutions are AAALAC-accredited so this is an important achievement for our college.

Finally, I want to invite you to the ribbon cutting and dedication of the Hixson-Lied Small Animal Hospital on Sept. 12, 2012. We are very excited to celebrate the completion of the companion-animal and exotics wing of the Dr. W. Eugene and Linda Lloyd Veterinary Medical Center — and, personally, I look forward to honoring the vision of our college leadership that was put into motion several years ago. Watch our website (<http://www.vetmed.iastate.edu/>) for details.

As always, thanks for all you do for our college. Have a great summer!

Regards,



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



ISU Veterinarian Lends Extension Expertise in Afghanistan & Pakistan



Dr. Grant Dewell, ISU extension veterinarian, meets with Afghan and Pakistani extension trainees as part of a USDA-sponsored project to provide agriculture training in Afghanistan and Pakistan.

Iowa State University is partnering with four other universities in a U.S. Department of Agriculture-sponsored project to provide agriculture extension training in Afghanistan and Pakistan. The consortium of universities includes University of California-Davis, Iowa State, University of Maryland, Purdue University and Washington State University.

“With 70 percent of its domestic gross product based on agriculture, and 60 to 70 percent of its people employed in agriculture, it’s important to strengthen both countries’ agriculture through their extension programs,” said Dr. Grant Dewell, ISU beef extension veterinarian and assistant professor at ISU’s College of Veterinary Medicine. Dr. Dewell is one of the U.S. extension educators tapped for this important international effort.

Moving from Top-Down to Bottom-Up

“The extension system in Afghanistan and Pakistan is government-driven, instead of needs-driven,” Dr. Dewell said. “Our goal is to help them develop a ground-based extension program where extension personnel go to the farm and talk to the farmers.”

To strengthen the extension personnel’s technical skills and delivery of information, the USDA provided funding for workshops in Pakistan and Afghanistan. The workshops focus on increasing the extension trainees’ knowledge of agriculture and improving their outreach skills.

During a five-day workshop held in Nov., 2011, at Nangarhar University in Afghanistan, Afghan and Pakistani extension trainees were taught how to apply science and research to address issues that farmers face. In May 2012, U.S. extension educators invited farmers to the university so Afghan and Pakistani trainees could interview them to learn more about their concerns and problems and develop a plan to solve them.

The next workshop scheduled for fall of 2012 will be similar to the May workshop but the Afghan and Pakistani trainees will travel to farms to meet with farmers, to better understand agriculture practices.

Dr. Dewell explains that with the availability of the Internet and smartphones, farmers have access to information about modern agriculture. “They see what is happening in developed countries and want to bring those same practices to their farms,” he said. To do that, he says, they need to be less reliant on government to fix their problems. “Many farmers still believe that the government should be doing more for them, while others have figured out that by solving problems themselves, they can affect change more quickly.”

“Our goal is to help them develop a ground-based extension program where extension personnel go to the farm and talk to the farmers.”

For example, said Dr. Dewell, the Pakistani government provides 50-pound bags to farmers so they can store their wheat. When harvest starts, however, the government doesn’t have any bags because those go to the producers with larger farms. “Now, the smaller farmers have figured out that waiting isn’t going to move them forward, so they are developing a more entrepreneurial approach to solving their problems.”

A Tale of Two Countries

It’s no surprise that Iowa State University is the university tasked with helping Afghan and Pakistani extension build its expertise and knowledge in livestock health and production practices. Extension veterinarians at Iowa State have a long history of outreach around the world.

Dr. Dewell and other agriculture specialists at the university helped prepare Iowa’s National Guard Agriculture Development Team for deployment to Afghanistan. “The ADT went to Living History Farms in Iowa for a glimpse at what they would see in Afghanistan and Pakistan,” Dr. Dewell said. “The countries are 50 to 100 years behind us in agriculture development.”

Both countries face significant challenges, and although close geographically, they couldn’t be more different, says Dr. Dewell. “Afghanistan’s livestock population consists of goats and sheep and it’s a struggle to find enough forage to feed the animals. Afghanistan has a large population of nomadic people who trail the goats throughout the eastern part of the country. These people find pasture land where the goats can graze.”

Not surprising that the goats have health issues because of the inadequate nutrition. “We’re trying to get the farmers to look at alternative feed such as waste vegetables. Also, we’re re-establishing trees that were wiped out during the 30 years of conflict. If we can get trees re-established, then the soil erosion can be controlled and native grass can grow, offering a good source of feed for the goats.”

“While Afghanistan has small family farms with five or six goats, some sheep, and maybe a draft cow and milk cow, Pakistan has some large farms with hundreds of hectares and combines,” he said.

“Pakistan has British influence, while Afghanistan is still very tribal,” he explained.

A commonality between both countries, said Dr. Dewell, is the openness and receptiveness of their people. “Everywhere we have gone, the people have been very hospitable to us. It’s been an extraordinary experience.”

LAST *but not* LEAST

Gone are the days when anesthesiologists had to sidestep around anesthesia machines, students and monitoring devices within the close confines of the induction/surgery prep area. Gone, too, are the days when surgeons and technicians had to pass through one surgical suite to get to their patients in the adjacent suite.

When the new anesthesia/surgical suites complex opened May 29, it marked the completion of the small animal hospital renovation and expansion project at the Lloyd Veterinary Medical Center. The 16,616 square-foot, surgical complex is the size of the “old” small animal hospital. A faded outline of the sign by the entrance of the old hospital is visible by the hallway leading into the surgical complex area. A landmark that orients visitors to what was, while offering a peek at an almost unrecognizable new hospital.

The new anesthesia/surgical complex has five state-of-the-art surgical suites that rival any veterinary (and some human) hospitals in the country. Technically advanced and fully integrated, its design reflects the new standard of care and the changing face of surgery.

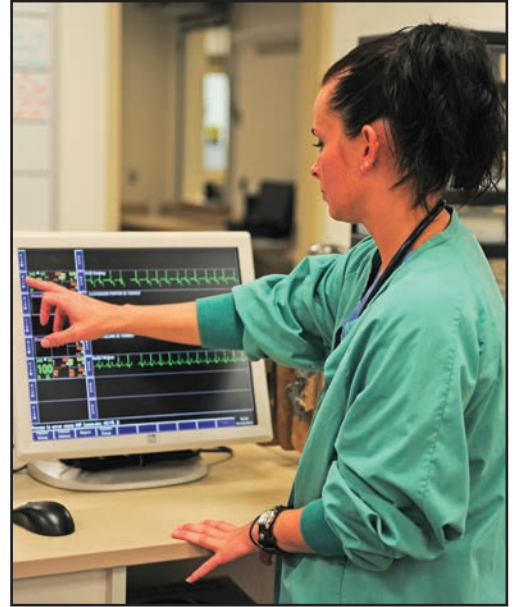
The anesthesia induction area is at the center of the surgical complex. It is large enough to hold eight patients,

with separate areas for quiet and trauma induction, as well as a separate patient recovery room monitored by the anesthesia technicians. It is a vast improvement over the previous area, which could hold three patients, while also serving as the scrub-in area for surgery, and surgical equipment storage area.

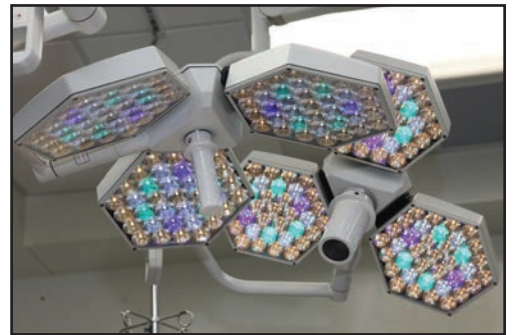
Dr. Karl Kraus, chief surgeon at the small animal hospital, explains that the flow and layout of the complex helps the specialists to interact with other specialists, working together to offer advanced care to patients.

“The surgical area was designed to make the most efficient use of space, to accommodate high-tech, multi-media equipment, and to provide a sterile environment for patient care,” Dr. Karl Kraus said.

For starters, the German-made Trumpf lights located above each surgical table allow the surgeon to adjust the color of light to the type of surgery. For instance, the traditional white surgical lights reflect off bone, so surgeons can change the color of the lights to provide optimal contrast and resolution, for both orthopedic and soft-tissue surgeries. Although the Trumpf lights are the Taj Mahal of lights, they are also quite practical. The LED bulbs have



Advanced telemetry monitoring allows anesthesiologist and technicians to monitor patients' vital signs from throughout the hospital. *Photo /Katy Van Est*



The new state-of-the-art surgical lights can be adjusted to eliminate shadows and provide optimal color temperature (by adding blue and amber tones) so surgeons can see the subtle color differences in soft tissues and bone. *Photo /ISU Foundation*

low power consumption, generate less heat, and have a long life.

Each surgical suite has large, high-definition plasma screens and has capability for live surgical broadcasts for learning and training.

A top consideration in the design, said Dr. Kraus, was sterility. He explains that the floors have no seams to provide a sterile surface after cleaning. The paint on



One of five operating rooms in the new surgery/ anesthesia suite. Photo/Katy Van Est

the walls is also easy to clean and offers no hiding places for bacterial contamination. Central to the sterile environment for the operating rooms are the HEPA filtration system to further contain and prevent the spread of infection.

A station for the technicians is centrally located near the surgery suites where they can monitor patients and check the surgery suites to see if assistance is needed.

“One of the most expensive part of the complex is the staff,” Dr. Kraus said. “The layout of the suite allows the most efficient use of our team. From a vantage point in the hallway, a technician or surgeon can see all five operating rooms.”

In addition to the anesthesia and surgical areas, the complex includes a cardiac catheterization room, dental suite with two wet tables and x-ray machines, an

endoscopy room, and minor surgery and minor procedure rooms. There are also men’s and women’s locker rooms located by the scrub sinks in the sterile area of the complex.

“Without a doubt, this facility is one of the newest among the veterinary colleges,” Dr. Kraus said. “It allows us to provide the highest standard of care for our patients, clients, and referring veterinarians.”

Let's Give Them Something to Talk About



Dr. Dan Thomson at a Kansas feedlot.
Photo/David Mayes, Kansas State Communications
and Marketing



“Speaking is not always natural,” says Dan Thomson (‘00), DVM, PhD. “It’s a trade you have to work at.”

For Dr. Thomson, speaking is all about “connecting” with your audience. As the host of Doc Talk, which airs weekly on cable television’s RFD-TV, he must have a message that resonates and delivery that captures his viewers’ interest. With an easy-going manner, and friendly, sincere style, Dr. Thomson banter with his guest experts and provides important and useful information to pet owners, livestock producers and consumers.

Having grown up in a clinic where his father and grandfather practiced, Dr. Thomson was schooled early on in the art of small talk and conversing with people with widely varying backgrounds.

“When I was a kid, we had people walking through our clinic all the time. Some just came in to talk and have a cup of coffee.”

The conversations and interactions he saw instilled the fact that veterinarians are “people-to-people first.” Simply put, says Dr. Thomson, “Animals don’t pick their veterinarians. People do.” In his new show, he focuses on connecting with the viewer and providing explanations on subjects producers and homeowners want to learn.

“As a veterinarian, I can’t think of a profession that is easier to find something to talk about than veterinary medicine,” Dr. Thomson said. “There’s not one aspect of veterinary medicine that I don’t enjoy. I could be a small animal practitioner tomorrow, and just love it.”

During a typical 30-minute show, only 15 minutes is content. Dr. Thomson picks a topic, and discusses major points that he and his guest want to communicate. “We try to do the segment in one take.”

“It was hard at first. I looked down a lot, didn’t enunciate my words ... it was nerve-wracking. Now, it’s easier.” But,

not all goes smoothly. Dr. Thomson says he’s always surprised when a guest who is outgoing and talkative, all the sudden stops talking and locks-down the minute the camera starts rolling. “I always have to anticipate taking over and that gets easier with experience.”


The viewership on RFD-TV is beef- and equine-focused. Each month, Doc Talk will cover two to three topics directed at that segment of the audience, and one segment might focus on a small animal or exotic animal topic.


For the show’s livestock producer and farmer audience, Dr. Thomson plans to cover information on animal production, health and welfare, including best management practices. “Educating this audience on current topics is also important,” Dr. Thomson said.

Recognizing that many viewers may not be involved in agriculture, Dr. Thomson will focus on food safety and the veterinarian’s role in public health, animal welfare and other areas of food production.

The show debuted on Monday, April 30, in the 3:30 p.m. time slot. “With kids coming home from school at that time, there might be an opportunity to do a kid’s program, maybe showing kids where food comes from and how it is produced,” Dr. Thomson said.

“I’m having a lot of fun and having the opportunity to talk about veterinary medicine to the public makes it all worthwhile.”

Dr. Thomson is a 2000 graduate of Iowa State University’s College of Veterinary Medicine. He is the Jones Professor of Production Medicine and Epidemiology and Director of the Beef Cattle Institute at Kansas State University’s College of Veterinary Medicine. 



Dr. Melissa Ciprich (left) and Dr. Autumn Chrouser ('11) doing spay and neuters at the Crow Creek Indian reservation in South Dakota. Photo/Katy Van Est

BEYOND THE CLASSROOM

Hands-on experience and so much more

Two days, 350 animals

In early June, ISU veterinarians and students made the 9-hour journey to a South Dakota Indian reservation where they provided a free veterinary clinic to the people of Crow Creek Tribal Nation.

After turning the local fire station into a small animal hospital (and the local rodeo grounds into an equine clinic), the veterinary team prepared for the hundreds of people who would bring their pets for much-needed veterinary care. The team was not disappointed.

A Recipe for Trust

“The major challenge of many service programs geared toward tribal nations is one of trust,” said Dr. Melissa Ciprich who leads the program with Dr. Joan Howard, both ISU veterinarians at the College of Veterinary Medicine.

Acceptance isn't always easy, and trust difficult to earn, but the veterinary team has found success where other programs haven't. “We've been fortunate that we have built such a strong relationship with community members and tribal council members in such a short time,” Dr. Ciprich said. “Much of that is owed to our acceptance of their beliefs and the practice of cultural humility while we provide our services.”

The veterinary team also works closely with the Indian Health Services sanitarian who does the public health work on the reservation.

Once a teacher, always a teacher, Dr. Ciprich emphasizes to the team that their service isn't about providing free veterinary care. “It's about providing guidance on care for their companion animals, strengthening the human-

animal bond, and improving the health of both the animals and caregivers – no strings attached.”

Now in its fourth year, the program has also become a social event for volunteers and the community alike. Everyone involved anticipates it and looks forward to June. “It was really hot both days,” said Dr. Howard who is in charge of equine care during the clinic. “Some of the horse owners brought sandwiches for us on the second day. So there we were, all of us sitting in lawn chairs, sharing a meal and talking.”

Dog, Cats, and Horses, too

From early morning to late into the evening, the team provided preventive care such as wellness exams, vaccinations, spays/neuters, heartworm tests, as well as treatments for lacerations, parasites and worms.

For veterinary students, it's an opportunity to get hands-on experience. They learn to take a patient's history from the owner, give vaccinations, and perform diagnostic tests – all under the watchful eye and supervision of the veterinarians.

"This was my first time at the reservation," said Kristin Heilmeier ('14). "In two short days I gathered a wealth of experiences, in particular being able to impact, not only so many animals, but also the community. The gratitude shown and expressed by the owners made the long days worth every moment."

This year, ISU equine veterinarian David Wong joined the group. "With his help, I was able to do more dentals on horses, while he did castrations," Dr. Howard said. "The extra care that we can provide with even one additional person is amazing."

"In two short days I gathered a wealth of experiences, in particular being able to impact, not only so many animals, but also the community. The gratitude shown and expressed by the owners made the long days worth every moment."

In the past, the equine team has gone to the farms to take care of horses, much like they do at ISU when they travel to area farms. This year the team asked people to bring their horses to the rodeo grounds just outside the town. "We had chutes at the rodeo grounds which made it a lot safer for the volunteers and the horses," Dr. Howard said. "For one of the older farmers, Dr. Wong drove to the farm to provide care for his horses."

For those who have participated in previous years, the experience continues to add value to their education. "I've gone to Crow Creek for two years and it was great to see some of the same animals and know that we have earned the trust of their owners and have been able to build a relationship that helps improve the health of their pets," said Uri Donnett ('14).

"Not only do we get the hands-on experience, we also receive training in how to work with and communicate with clients, skills we don't get a lot of training in until our fourth year of veterinary school," Uri adds.

Something for everyone

Whether the team was working in the firehouse or at the rodeo grounds, the children of the tribal members were watching and learning. "A science teacher was one of our clients and he asked us to show the children parasites under microscope, which we generally do as a teaching tool," Dr. Ciprich said.

"Seeing the interest of the kids in what we were doing, and in the well-being of their pets was great," Uri said. "It didn't matter how hot it was outside, the kids were excited to learn more their animals."

As they work, the veterinarians and students all become walking, talking advertisements for a career in veterinary medicine to an audience who seldom interacts with members of the veterinary profession. "Over the years, several of the young people have told us that they would like to be veterinarians some day, too," Dr. Ciprich said. "It's a great feeling to have that type of impact."

Preparation Begins Early

This year's preparations began six months ago. "We start soliciting monetary donations and contributions of animal health products early," Dr. Howard said. "The fundraising is always a challenge."

Volunteers sign up to make the trip, and several come each year.

THANKS SPONSORS *for your generous donations*

Pfizer Animal Health

Bayer Healthcare

Boehringer Ingelheim, Vetmedica

Merck Animal Health

Midwest Veterinary Supply

Dermapet

JRG Supply

Five Star Compounding Pharmacy

HyVee

Iowa State University
Lloyd Veterinary Medical Center

Purina

Ames Animal Shelter

WANT TO HELP?

For those who wish to support the Crow Creek Veterinary Project, gifts can be made to the ISU College of Veterinary Medicine's Companion Animal Fund, and indicate that the donation is to be directed to the Crow Creek project.

For more information about the project and ways that you can support the effort, please contact:

Dr. Joan Howard at
jmhoward@iastate.edu

“Not only do we get the hands-on experience, we also receive training in how to work with and communicate with clients, skills we don't get a lot of training in until our fourth year of veterinary school.”

“It's like going on a camping trip,” Dr. Howard said. “You try to anticipate everything you will need, but you have to keep stripping it down to the bare bones to what you can transport in the vans and trailer.”

After returning to Ames, all members of the team realized that an enormous amount of time, talent, and resources were used to complete this project, Dr. Wong said. “We are grateful for all those who

participated and for all the individuals who supported the project financially and through veterinary supplies.”

As for Drs. Ciprich and Howard, they are already planning for next year.

For Uri, he, too, looks forward to participating next year. “It's important to reach out to the communities around us. I definitely want this type of service work to be something I do after I graduate.”

Dr. Joan Howard, ISU equine veterinarian, performs a dental on a horse with veterinary students Emily Houge ('13) and Nicole Jackson ('13) at the Crow Creek Indian reservation in South Dakota. Photo/Katy Van Est



COLLEGE & ALUMNI NEWS

IOWA STATE UNIVERSITY COLLEGE OF VETERINARY MEDICINE



Dr. Lisa K. Nolan, dean of the veterinary college, talks with Tasia Nielsen, of the college's Wildlife Care Clinic, before she releases the eagle. More than 200 people were on hand to watch the release of two eagles on March 24 at McFarland Park in Ames, Iowa. A second eagle that was rehabbed by SOAR (Save Our Avian Resources) was also released that day by Dr. Sharron Quisenberry, ISU's Vice President for Research and Economic Development.
Photo/Tracy Ann Raef

Bald Eagle Released

A rescued bald eagle was released into the wild after a month of treatment and rehabilitation by Iowa State University College of Veterinary Medicine and SOAR (Save Our Avian Resources), a nonprofit organization.

Last month, three eagles were found and brought to the college's Lloyd Veterinary Medical Center. ISU veterinarian Dr. Bianca Zaffarano examined the two surviving eagles (one had already died). Diagnostic testing confirmed higher-than-normal levels of lead in the blood, and possible other toxicities. Treatment included electrolyte fluids with a high-protein gruel, and chelation therapy where chemicals are administered that bind to the lead and carry it out of the system.

After four days, only one eagle had survived, and was strong enough to be transported to SOAR where she continued her rehabilitation in SOAR's new flight pen that gives the eagle enough space to get its muscles back in shape.

"We have an amazing crew who have all been trained to do this. They did a great job," Dr. Zaffarano said. She and the Wildlife Care Clinic staff oversaw the eagle's rehabilitation, which included feeding the bird and taking blood samples, among other duties – all of which can be dangerous.

"The eagles are wild animals, and humans are a threat to them," said Dr. Zaffarano about the difficulties of working with the eagles. "Any human contact is highly stressful for them. They are not used to being restrained. When treating them, we do our work in short spurts to minimize the stress. These raptors also have long talons that can cut through your skin and go all the way to the bone if you're not careful."

Dr. Zaffarano says this is the fourth bald eagle at the clinic this year. In her previous three years, she saw only one sick bald eagle.

She sees the increase as a positive sign.

"This is one of the greatest environmental stories in the state," she said. "We've seen a huge resurgence of the raptors, and when you see raptors come back it means the ecosystem is healthier."

ISU Veterinary Diagnostic Laboratory Offers New Milk Residue Assay

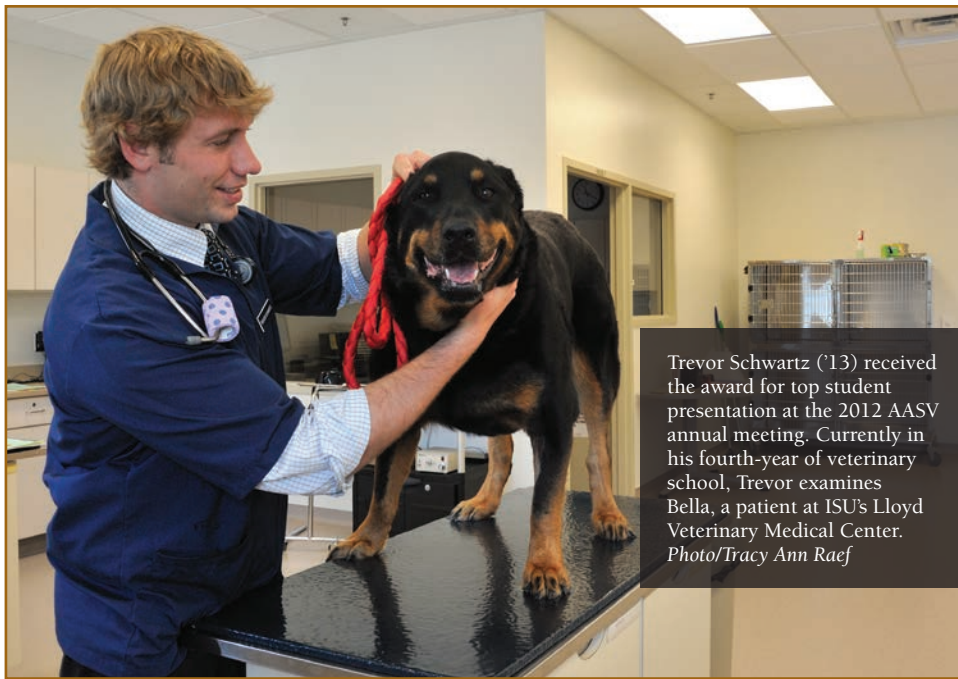
Access to a highly sensitive and specific confirmatory test that allows dairy producers to check milk samples for drug residue concentrations is now available through the Cyclone Custom Analyte Detection Service (CYCADS) at Iowa State University's College of Veterinary Medicine.

Dairy farmers use pharmaceutical compounds every day for the treatment of painful and economically significant conditions such as mastitis and lameness. To protect the public from any drug residues that may pose a risk to human health, milk samples are tested by regulatory authorities using assays that are more sensitive than conventional screening tests currently used on the farm.

This new test will provide U.S. dairy veterinarians with an assay similar to the one used by the Food and Drug Administration and other regulatory authorities, for a fraction of the cost normally associated with this type of test when done by other laboratories.

The test assay allows dairy producers and veterinarians to:

- identify and quantify drug concentrations in samples that tested positive on conventional screening tests
- determine drug depletion in milk after a drug has been administered in an extralabel manner



Trevor Schwartz ('13) received the award for top student presentation at the 2012 AASV annual meeting. Currently in his fourth-year of veterinary school, Trevor examines Bella, a patient at ISU's Lloyd Veterinary Medical Center. Photo/Tracy Ann Raef

- check whether an accepted drug treatment protocol is being adhered to in a herd
- analyze milk from recently purchased cattle prior to them joining the herd as part of a biosecurity protocol
- determine whether dairy feed has been adulterated with antimicrobials used in beef and swine production.

The cost of the tests range from \$50 to \$75 per sample, and the turnaround time is two business days.

“The CYCADS milk residue screening assay will allow veterinarians to easily compare the drug screening results from individual cow or bulk tank milk samples with the established tolerance or ‘safe concentration’ for pharmaceutical compounds assuming these have been established,” said Dr. Hans Coetzee, associate professor at Iowa State’s College of Veterinary Medicine. “Where no tolerance has been established we will report the results accordingly. This will allow veterinarians to assist their clients in making a science-based determination as to whether the milk is suitable for consignment.”

For more information about the testing service and how to submit samples, visit: <http://vetmed.iastate.edu/diagnostic-lab/cycads>

CYCADS is a group of veterinary pharmacologists and toxicologists supported by analytical chemists who focus on high-throughput, pharmacology-focused analytical services. The Iowa State’s Veterinary Diagnostic Laboratory is the only veterinary laboratory offering such service. The goal of CYCADS is to develop innovative tests aimed at improving the health and welfare of livestock and safeguarding international trade agreements and public health.

ISU Veterinary Students Receive Top Awards at AASV Meeting

Trevor Schwartz ('13) received the award for top student presentation during the 2012 annual meeting of the American Association of Swine Veterinarians in Denver, Colo. Pfizer Animal Health sponsors the award in the amount of \$5,000. Trevor’s presentation was titled “Effect of waste environment on survival of *Brachyspira hyodysenteriae*.”

Veterinary students representing 14 universities submitted 47 abstracts for consideration. From those submissions, fifteen students were selected to present during the annual meeting.

A panel of judges selected the recipients on the basis of communications skills in the writing of the abstract and the presentation of the case report, and on applicability of the research to swine medicine.

Trevor had the opportunity to manage a *Brachyspira* project last year with Dr. Jeremy Pittman of Murphy-Brown. Having worked on these types of projects in the past, Trevor was intrigued by this particular project because it put a different spin on the approach of *Brachyspira* ecology and elimination, and was conducted in a region of the country that he had not previously worked.

Trevor competed in the AASV student seminar three years ago during his first year in veterinary school. He says the experience helped him better compete earlier this year. “I’d say that the confidence and knowledge that I gained in veterinary school and listening to my many amazing mentors throughout the project and presentation process were the critical keys that helped me do well.”

Trevor’s parents are veterinarians – his mother is a local small animal practitioner in Ames and his father is a diagnostician at ISU. Now a fourth-year student, Trevor is still keeping his options on what he’d like to do after graduation. “Right now, everything is interesting,” he said.

ISU students have had a successful run of top presenters, with students finishing first in 2009 and 2010. Students have also continued to successfully compete to win scholarships in the top levels of the competition.

This year of the total 15 presenters, three ISU students received \$2,500 scholarships during the competition: Jessica Abbott, Marisa Rotolo, and Paul Thomas. Cara Haden and Jonathan Tangen received \$1,500 scholarships. These additional scholarships were provided by Eli Lilly and Company, on behalf of Elanco Animal Health. 📌



Harms to lead fundraising efforts at CVM

In July, Ryan Harms joined the College of Veterinary Medicine at ISU as its new senior development officer. Ryan replaces Jeff Spielman who served as the college's chief fundraiser for six years before leaving to accept a position at Purdue University's College of Veterinary Medicine.

Ryan comes to the college with over 12 years of experience in development and alumni relations experience at four universities. Previously he was the senior development officer for ISU's College of Agriculture and Life Sciences where he secured gifts and commitments of more than \$9.7 million and coordinated the completion of a \$14 million private fundraising goal for the Biorenewables Complex Phase II.

From 2006 through 2009, Ryan was the director of development at the University of Kansas where he increased total annual support of the School of Pharmacy by 32 percent. He also established and led a \$10 million private fundraising goal for the school's expansion and increased memberships in the school's Dean's Club by 31 percent.

"I'm excited to join the College of Veterinary Medicine and look forward to working with alumni and donors to link their philanthropic passion with the strategic initiatives of the college," Ryan said.

A native of Illinois, Ryan grew up on his parent's dairy and grain farm. He is a 2000 graduate of the University of Illinois, Urbana-Champaign with a B.S. in Kinesiology, Athletic Administration and a M.S. (2002) in Leisure Studies, Sports Management.

In Memoriam

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

1930s

Lawrence Minsky ('37)

Sherman Oaks, Calif.,
died September 15, 2011

R. Leland West ('36)

Colorado Springs, Colo.,
died June 9, 2012

1940s

Garnn O. Anderson ('43)

Cloverdale, Calif.,
died November 19, 2011

John Arnold ('41)

White Bear Lake, Minn.,
died February 8, 2012

Carlos Cooper ('49)

Bonner Springs, Kan.,
died October 24, 2011

Louis Feldman ('42)

Story City, Iowa,
died September 8, 2011

Ray Hull ('45)

Marion, Iowa,
died May 10, 2009

Leo Lemonds ('49)

Hastings, Neb.,
died December 12, 2011

LeRoy Nelson ('49)

Bricelyn, Minn.,
died December 8, 2011

Melvin Nuckolls ('40)

Oskaloosa, Iowa,
died December 1, 2011

John Tillie ('49)

Muscatine, Iowa,
died February 29, 2012

Cornelius Van Houweling ('42)

Ames, Iowa,
died February 23, 2012

1950s

Roland Bunge ('51)

Nacodoches, Texas,
died July 11, 2011

Bernard Donelan ('59)

Montrose, S.D.,
died December 4, 2011

Alan Knudsen ('56)

Lake City, Minn.,
died October 30, 2011

Milo Kontz ('51)

Pueblo, Colo.,
died September 28, 2011

Roy McGraw ('57)

Essex, Iowa,
died February 17, 2012

Robert Nelson ('54)

Waupaca, Wis.,
died October 24, 2011

Bruce Rosenquist ('58)

Isabella, Mo.,
died October 29, 2011

Lenwood S. Shirrell ('52)

Frankfort, Ky.,
died June 8, 2012

1970s

Lee Johnson ('76)

Reinbeck, Iowa,
died November 22, 2011

Kenneth E. Keppy ('72)

Bettendorf, Iowa,
died August 17, 2011

David L. Pence ('76)

Ankeny, Iowa,
died May 12, 2012

Craig A. Saveraid ('84)

Winterset, Iowa,
died June 26, 2012

IOWA STATE UNIVERSITY

College of Veterinary Medicine
Ames, IA 50011-1250

Return Service Requested

Save
the
date

September 12, 2012

Building Dedication

Join us for the official dedication of the new Hixson-Lied Small Animal Hospital at the Dr. W. Eugene and Linda Lloyd Veterinary Medical Center at the College of Veterinary Medicine.

Date: Wednesday, September 12

Time: 4:30 p.m., Dedication Program

Program: Enjoy tours of the new small animal hospital and the dedication ceremony. More details will be coming soon. In the meantime, we hope you will join us for the celebration. Check our website for more information in mid-August.