

# *gentle*doctor

SUMMER 2016 | VOL.30 NO. 1



*All that*  
**Jazz**

IOWA STATE UNIVERSITY  
College of Veterinary Medicine

# gentledoctor

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### On the Cover

Jessica Elbert ('18).  
Story on page 4.

Photo: Christopher Gannon

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for Academic & Student Affairs

### Editor's Note

In the Fall/Winter 2015 issue of the Gentle Doctor, donors of "Frosty," the life-size Holstein dystocia simulator in the college's Clinical Skills Laboratory were omitted. "Frosty" was made possible through donations from Dr. Paul Armbrrecht ('71), Lake City, Iowa; Dr. Scott Armbrust ('75), Green Bay, Wis.; Dr. John Kurt ('75), Prairie du Chien, Wis.; and Dr. Dan Smith ('75), Montrose, S.D. Additional funds were provided by the ISU Department of Veterinary Diagnostic and Production Animal Medicine.



Photo: Paul Gates

## *Dear alumni and friends,*

**F**rom the day the Dr. W. Eugene and Linda Lloyd Veterinary Medical Center opened its doors eight years ago, the small and large animal hospitals were a success.

That's because our veterinarians constantly offer outstanding care to the dogs, cats, horses, sheep, pigs, cows and exotic animals that come through our doors. Iowa State has always enjoyed a strong reputation when it comes to care for companion and food animals. Truly, our highly skilled specialists are among the best when it comes to prevention, diagnosis and treatment of diseases in all animals regardless of species.

And our hospitals are well positioned to continue that level of expertise for many years to come. New clinical faculty hires in small and large animal veterinary medicine have dramatically impacted the Lloyd Veterinary Medical Center and are a major reason why the hospitals have experienced unprecedented growth in both patient counts and revenues over the past year.

In March of this year, the hospitals' monthly revenues topped \$1 million for the first time ever. What is even more impressive is that same month, the number of patients treated at the hospitals exceeded 2,000, another milestone achieved for the first time. That's good for our operation and wonderful for our teaching program because more cases mean more chances to teach the superior 'hands-on' skills that have long been the hallmark of Iowa State veterinarians.

In addition to the new clinical hires, a number of other initiatives has fueled this growth. We have tightened hospital procedures and begun intensive monitoring of revenues and expenses. Under the direction of Dr. Tom Johnson, director of hospital operations, the hospitals have stepped up their personal communications with you – our referring veterinarians. You, in turn, have significantly increased our caseloads by entrusting your patients to us.

This, I believe, is just the beginning of what the large and small animal hospitals can accomplish ... we are on a great trajectory! Be looking for improvements as we continue to expand our specialty services in order to better serve you, the needs of Iowans and their animals.

Don't expect one thing to change. You can be assured your patients will continue to receive the very best care available.

Best regards,

**Lisa K. Nolan, DVM, PhD**

*Dr. Stephen G. Juelsgaard* Dean of Veterinary Medicine  
Iowa State University



# All that Jazz

By Tracy Ann Raef

**F**or many, the road to veterinary school is a straight path.

For some, the straight path includes a couple (or a lot) of bumps along the way. For a few like Jessica Elbert, the path isn't straight at all. It's a scenic route, with lots of curves and stops.

The inside cover of her music CD says: "Jessica Elbert's first words weren't spoken, they were sung, so it was no surprise that music would become her life's work."

But life happens, and what may seem to be the logical career choice at first, may not be the final career destination.

"For a few years when I was young, I wanted to be a veterinarian, but music took over," Elbert ('18) said. Growing up in a family of singers, Elbert took voice lessons, sang in choirs and bands at church and in high school, and joined an a cappella group in college.

Elbert started her undergraduate studies as a psychology major and had completed her major requirements when she decided to pursue a music career. Classically trained, Elbert loved the music of opera. But, she also enjoyed the fun of pop music. "I fell into jazz. It is a great medium between opera and pop, of musical depth and commercial appeal," Elbert said.

After graduation, Elbert moved to New York City. "I had no idea what I was doing. I didn't have a job, but a friend found an apartment in mid-town Manhattan," she said. Elbert connected with Peter Eldridge, a singer/composer with New York Voices. He had an opening in his schedule for a student.

Two months later with encouragement from Eldridge, Elbert found a pianist and put together a band.

"New York has lots of venues for musicians – that's the beauty of New York," Elbert said. "The brutality of the city is that there are a lot of musicians willing to perform for free."





For musicians to survive, though, they have to get exposure and experience. And, that's what Elbert did. "When I moved to New York, I had a seven-year plan where I had to stick with the music. And, after 10 years, if I was still struggling to make a living, I would re-evaluate my career choice."

After eight years as a jazz singer, Elbert decided to develop a press kit to market herself to wedding planners and redesign her website. The launch of the press kit and new website coincided with the crash of 2008. "Everyone was hit hard financially. New Yorkers weren't going out much to restaurants, or hiring live musicians for their events."

At the peak of her music career, Elbert was working three jobs. "I had to make some tough decisions," she said. "I took a temp job as a receptionist at a wealth management company, eventually becoming a compliance officer for the firm."

Elbert attributes the confidence that she gained during that job with her

decision to pursue veterinary medicine. "It took me 18 months to decide to end my pursuit of music, and to pursue a career in veterinary medicine. I wanted to make sure I was moving on to the right thing."

It had been 10 years since Elbert graduated from college. "It took a few years for me to re-take some of the sciences courses and other pre-requisites for veterinary school, while I worked at a small animal clinic to pay the bills and get animal experience," said Elbert.

During that time, Elbert fell in love with the microscopic world and came across a job posting for a wildlife pathologist position on the AVMA website. "I read the job description and I knew this was the type of job I wanted."

At 34 years of age, she entered veterinary school.

As she begins her third year this fall, Elbert is certain that the field of pathology is the right choice for her. "I'm mesmerized by the disease process

from the cellular level to the gross level. I love that pathology helps answers the question of 'Why?'" Had Elbert chosen a career in her major of psychology, she would have liked to be a profiler. "I've always been drawn to the abnormal."

Does she miss performing on stage with her band? "I do miss music. There's electricity in the air as the music starts, and as the music continues it elevates all those in attendance. Music is healing. I loved that experience."

"Right now, I'm focused on learning as much as I can," Elbert said. "I'm looking forward to a career as a pathologist. And I'm grateful for the opportunity from Iowa State to pursue this rewarding profession."

*Elbert is spending the summer in Tasmania, where she's doing an internship focused on Devil Facial Tumor Disease that has devastated the population of Tasmanian Devils. [gd](#)*

# EMERGENCY Response

By Tracy Ann Raef

*Dr. Troy Brick, ISU Veterinary Field Services Clinician, talks with Tiffany Magstadt, Veterinary Field Services, who coordinates calls from livestock producers and emergency responders. Kristin Skoland, coordinator for the ISU Swine Medicine Education Center, reviews paperwork from a previous farm call.*  
Photo: Christopher Gannon

The call comes early in the morning. Local emergency responders have requested assistance with an accident involving a livestock trailer. Two veterinary trucks are dispatched loaded with equipment, driven by clinicians with a variety of expertise and veterinary students riding along ready to help.

The veterinary field services unit at Iowa State University's College of Veterinary Medicine receives two to three calls for assistance a year and each one never the same. "The college has assisted emergency responders

when trailers have been stuck in snowstorms, when trailers have mechanical difficulties with animals aboard, and when there's been an accident" said Dr. Troy Brick ('02), field services clinician.

Responding to these types of calls is something that the college, and Brick, believes is an important part of its mission to serve the community. The calls also serve as valuable, real-life training for veterinary students who, in turn, may have an opportunity to use the experience in their own communities after graduation.



## “Survival of the veterinary profession and the livestock industry is always dependent on people helping each other across disciplines.”

– Dr. Locke Karriker

### TEACHABLE MOMENTS

Brick says that the objectives for these calls are the same as any practitioner has when responding to a call. “We must ensure the safety of the responders as well as the health and welfare of the animals.” Evaluate the situation and decide how to manage it.

Those objectives can be taught in the classroom. But, many lessons come only through experience. For instance, the magnitude and sense of urgency of a livestock trailer accident involving multiple animals can't be recreated in the classroom.

In these situations, the minutes are ticking. “And, the number one limiting factor is time, and time becomes mortality,” says Dr. Locke Karriker, professor and director of the ISU's Swine Medicine Education Center. “We teach the students that if you stay calm, you can help the pigs faster than if you rush around. Hurried is not the same as fast; and frantic is never fast.”

### HAZARDS AND MORE HAZARDS

Most students have never been part of a mobile response team, so Karriker tries to prepare them for what they might encounter as they drive to the scene. “Sometimes, the scene can be emotionally challenging and the

severity and type of injuries might be surprising. Often, there are stressed animals that are going to react behaviorally and physiologically in different ways than they would normally.”

He also goes over safety protocols, reminding the students to be “situationally aware” as they are moving around the scene. “It's easy to get caught up in the situation and not see potential dangers, such as passing vehicles or an unstable gate inside the trailer,” he said.

Next, Karriker goes over the order of operations. “We'll first need to get all of the mobile animals off as fast as we can so we can tend to the ones that may be stuck or injured.” Often, the veterinary response team has a stock trailer in tow. This trailer is equipped with panels and other equipment that will help them to safely off load animals, and subsequently serve as a holding area and transport vehicle for the uninjured.

### COLLEGIALITY AND COOPERATION

In any emergency incident, you want calmness to prevail. And, most important, you want everyone to work together. “When we arrive, there may be fire-fighters and police, as well as other

emergency personnel already on the scene,” Brick says. “It's an important take-away for the students to see how well we work together with the other agencies.”

Karriker says most of our students have not had interactions with the police, other than perhaps getting a traffic ticket. “Here, the students walk with us to the officers to talk strategy.” The students also see colleagues working well with each other. “No one is a specialist in trailer accidents,” Karriker said.

“I came to ISU because we have every resource, and everyone works together extremely well,” Brick adds. “We're always willing and able to help our clients and the public. I'm happy to help out in whatever way is needed — maybe it's rounding up loose cattle, or maybe it's carrying equipment to where it's needed.”

“Survival of the veterinary profession and the livestock industry is always dependent on people helping each other across disciplines,” Karriker said. “Getting a chance to demonstrate that for a day is an important lesson for our students.” **gd**



This photo was included in Dr. Radford Davis' "Life in Sierra Leone" exhibit that was displayed in two galleries in Ames.

# Telling Stories

By Dave Gieseke  
Photos: Radford Davis

Still Photography from Public Health Scientist Bridges Art and Science

By day, Dr. Radford Davis is a prominent public health scientist. He has traveled the world working on global health issues with a stated goal of improving veterinary health in developing countries.

In recent years, Davis has added a new tool to his teaching arsenal. He now uses still photography to bridge art and science.

While he is an expert in his field of public health, Davis is also no slouch when it comes to a camera and lens even though he is self-taught.

"In my classes I can show a photo and tell the story behind the photo that the students cannot see without that

image," he said. "With my photos, students can see the people that are in a situation that tells the story.

"Students can look at the photo and it hits home with them a little bit more than if I just told what I saw."

While traveling Davis always has his camera with him. While consulting in Sierra Leone for that country's Ministry of Agriculture, Forestry and Food Security a few years back, he was in a village training community animal health workers. Soon he was snapping photos of the villagers.

The images became the subject of a one-man show "Life of Sierra Leone" that has been displayed at Iowa State's

Memorial Union and Wheatsfield Co-op in Ames. One frame from the show went on to be selected by *National Geographic* as one of 10 photos used to depict "End Poverty."

More than 3,500 photos were submitted and Davis' photo was selected because it not only highlighted poverty as a global problem but deepened viewers with an appreciation of the subject's situation.

The black-and-white image shows a village mother with her four young children. Davis was attracted to the scene because of the hardships the family had in Sierra Leone.

"She came from a farm family who plant rice by hand," Davis said. "I





*This image of a Sierra Leone mother and her family was one of 10 photos in a National Geographic "End Poverty" exhibit at the World Bank Headquarters in Washington, D.C.*

spoke with her and learned her children eat only about one meal a day, consisting solely of rice. She was concerned about the health of her young children and let me take her photo."

The photo was part of a *National Geographic* "End Poverty" exhibit at the World Bank Headquarters in Washington, D.C., last November. Davis says this photo is an example of how he tells stories with his images. "It's easy to take photos of desperate people," he said, "but you want to be sensitive to their situation. This photo in particular reflected a reality of how the woman and her family experienced consistent hunger every day.

"I hope that I am conveying a humanitarian aspect in my photography. In

this particular case, she wanted me to take her photo and know about her situation. She wanted help."

His Sierra Leone photos depict the poverty and hunger felt by the country's residents. But he is quick to point out that there were a lot of happy, smiling people there. "I found some miserable people in Sierra Leone," he said. "Any time you go to a country where people have no running water in their homes, you would expect that.

"But there are a lot of really happy people there as well. They may be poor, have no running water and yet they are quite happy. I try to make sure my photos tell both stories." **gd**

*Dr. Radford Davis, Photo: Christopher Gannon*



**ONLINE PHOTO GALLERY**  
[www.radforddavis.com](http://www.radforddavis.com)

# Cat That Received Prosthetic Legs at ISU Making Strides in Recovery

By Fred Love | Photos: Christopher Gannon

## IT TAKES A VILLAGE!

Vincent made over 100 visits to the Lloyd Veterinary Medical Center, from diagnosis to surgeries/follow-up. Thanks to the Orthopedic, Soft-Tissue, Radiology, Anesthesiology, and Primary Care service units whose specialists, residents/interns, students and technicians cared for him.



Vincent can't jump just yet, but it's probably only a matter of time.

The 3-year-old domestic short-haired cat paced across the floor of an exam room at Iowa State University's Lloyd Veterinary Medical Center with the legendary curiosity long associated with felines. He took in his surroundings and strolled over to the base of an exam table.

And that's when you could see it – just for a moment – in the way Vincent tensed his body and set his gaze toward the ceiling. He wanted to jump. He wanted to scale the exam table and find out what the view was like from the top.

But his titanium-alloy prosthetic hind legs kept him on the ground – for now, at least.

"I anticipate that he'll be jumping and doing really normal cat things very soon," said Dr. Mary Sarah Bergh, the veterinary orthopedic surgeon who attached Vincent's prosthetic legs and has overseen his rehabilitation.

Bergh, an associate professor of orthopedics, estimated that only a couple dozen animals in the world have received the sort of prosthetics Vincent now has. His recovery hasn't always been easy, due in part to how

little data is available to guide his rehabilitation.

But the overall arc of Vincent's recovery shows undeniable progress, a testament to innovative veterinary medicine and the dedication and love of his owner.

## BEEN THROUGH MORE THAN MOST

Cindy Jones, of rural Nevada, Iowa, first laid eyes on Vincent at the Story County Animal Shelter, where Jones works. Someone found the tiny kitten with injured hind legs at a campground and brought him to the shelter. Jones decided to take the kitten home and see what could be done for him.

"I took one look at him and fell in love," Jones said.

It was Emily Jones ('16), Cindy's daughter who first thought that Bergh might be able to help.

Bergh, who has worked with a wide range of injured species, first tried physical therapy with Vincent but realized early on that endoprosthetics represented the best chance at a normal life for the cat.

Vincent's implants require some special care. For instance, Jones has to apply an antibiotic spray to his legs twice



*Dr. Mary Sarah Bergh examines Vincent during a visit to the Lloyd Veterinary Medical Center.*

daily to prevent infections. But, on the whole, Vincent acts like any normal house cat, and Cindy quickly forgives the occasional hiss or scratch.

“He’s been through a lot more than most cats have to go through,” she explained.

## **A RARE PROCEDURE**

When Vincent was brought to the animal shelter as a kitten, his hind legs were missing below the midway point of his tibias, or shinbones. Bergh said she couldn’t ascertain exactly how he ended up in that condition.

Bergh worked with BioMedtrix, a veterinary orthopedics company that donated time and materials to the project, to design implants that could be inserted into the femur bones of Vincent’s legs and pass through his skin.

The design of the implants allows for Vincent’s bone to grow onto the titanium shafts to support his weight, she said. But the titanium shaft is exposed to the environment, which puts Vincent at risk for infection and is an ongoing challenge she and Jones have worked hard to overcome.

Vincent’s first surgery occurred in February 2014, and he was taking his first steps within days of the procedure. A second surgery followed in 2015, and he’s undergone subsequent treatments to gradually lengthen the prosthetic legs. Eventually, they’ll be as long as the hind legs of an average house cat to normalize his gait. At that point, he should be able to get around with little difficulty – even if he wants to try jumping.

Bergh said the experience with Vincent may help her and other veterinary orthopedic surgeons expand and improve the use of implants for animals in the future. She called this kind of procedure an “emerging field” that’s rare in veterinary medicine, but Vincent’s case may help answer some questions and make implants a more practical solution.

As for Vincent, Bergh said his future looks bright. “His bone is looking great. The implants are stable, and he’s walking really well on them,” she said. “I couldn’t be happier with how he’s doing at the current time. **gd**

## **WATCH VINCENT IN ACTION**

[www.news.iastate.edu/news/2015/12/02/vincentthecat](http://www.news.iastate.edu/news/2015/12/02/vincentthecat)



# Coaching, Teamwork, Bracketology and March Madness

By Tracy Ann Raef | Photos: Dave Gieseke



It only comes once a year, always in the spring. The team that wins does so through outstanding teamwork, excellent communications and great coaching.

NCAA Tournament? Nope! SAVMA Symposium.

Over 1,000 registrants traveled to Ames for the three-day SAVMA (Student American Veterinary Medical Association) Symposium held at Iowa State University and hosted by the College of Veterinary Medicine, March 17-19.

Everyone who has planned an event knows that the key to its success is people. It takes people – a lot of people — to plan, support, participate and execute a symposium. Leading the planning team for this symposium were general managers, Brittany Duellman ('17) and Brianna Whiting ('17).

They worked with 250 volunteers through 14 committees to plan and execute the symposium. They also had an all-star cast of college faculty, technicians, and private practitioners to lead lectures, wet labs, day trips, and social events.

“We started planning the symposium two years ago,” Duellman said. Key to their success during the long process was good communications. “It was critical that everyone was on the same page and that the right people were updated as things changed throughout the process,” Whiting adds.

Dr. Alex Ramirez ('93), associate professor and advisor to the college's student chapter of the AVMA, says he was most impressed by the excellent cooperation among the volunteers. “They were all focused on one mission — putting together a symposium that would meet the needs of the participants and showcase Iowa State University and the college.”



Because of the large number of participants, the lectures and luncheons were held at the Iowa State Center. Wet labs, 35 of them, were held at the college, taking advantage of the college's new facilities and faculty experts. Day trips to the Science Center of Iowa, Hawkeye Breeders, USDA's NADC, and the Blank Park Zoo were available. Social events were held including a night at Sukup End Zone Club at Jack Trice Stadium.

While the students included some of the more traditional symposium activities like the veterinary competitions and exhibits, they also wanted to be innovative both in the types of lectures and hands-on experiences.

New at this year's symposium were business-focused lectures for credit toward the business certificate program offered by the Veterinary Business Management Association. Also new to the symposium was a wellness day. "Incorporating a day devoted to wellness lectures and activities was a great way to start the weekend," said Matt Holland (Illinois '17), SAVMA president. "Inclusion of those activities really showed that the planners were in touch with what students wanted. Students loved it."

With the wet labs, the planning committee focused on agriculture to highlight Iowa's vast agricultural base, incorporating opportunities to work with swine, cattle, sheep and alpacas at the ISU teaching and privately owned farms. They also planned wet labs designed to feature the college's expertise in companion animal medicine, diagnostics and pathology.

Like past symposiums, there were a variety of lectures and activities planned, but one activity is left entirely up to the participants – networking. "Our profession is small," said Holland, "and we're going to rely on each other during our careers. The symposium is a way for students to start making connections early." Ramirez agrees adding that the most important aspect of the symposium are the hallway conversations students have with each other, and the opportunity to build relationships that may last their entire careers.

Duellman and Whiting confess that managing the symposium planning could have been a full-time job, and at times, it was. Balancing school and the "job" were difficult, but school was always first. Both agree that using the university's conference planning services saved the committee time and

expense. "They know what works and what doesn't," Whiting said. "The biggest piece of advice we gave to the Texas A&M University general managers who would be planning the 2017 symposium was to use their university's conference planners service."

Duellman and Whiting emphasized that the symposium wouldn't have been possible without the support of Dean Lisa Nolan and the college. "We wanted to host a symposium that was conducive to sharing ideas and information. The support we were given helped us plan a successful symposium," they added.

"The students attending the SAVMA Symposium were treated to an outstanding program put together by our student organizing committee," said Nolan, *Dr. Stephen G. Juelsgaard Dean of Veterinary Medicine*. "The committee did a fabulous job of obtaining top veterinary professionals to present a wide-ranging and informative set of sessions." **gd**

# An Ounce of Prevention is Worth a Pound of Cure

By Danelle Bickett-Weddle, DVM, MPH, PhD, DACVPM

You do not have to look very hard to find examples of re-emerging disease outbreaks — canine influenza, salmonellosis in pet turtles, bovine tuberculosis, and porcine epidemic diarrhea virus — or transboundary diseases — high pathogenicity avian influenza (HPAI) and Zika virus — that caused illness or death loss in those infected. Preventing these and other devastating diseases from affecting animals or the people that care for them is an important responsibility of veterinarians. Iowa State University's Center for Food Security and Public Health (CFSPH) has developed a series of resources aimed at disease prevention to make that obligation easier.

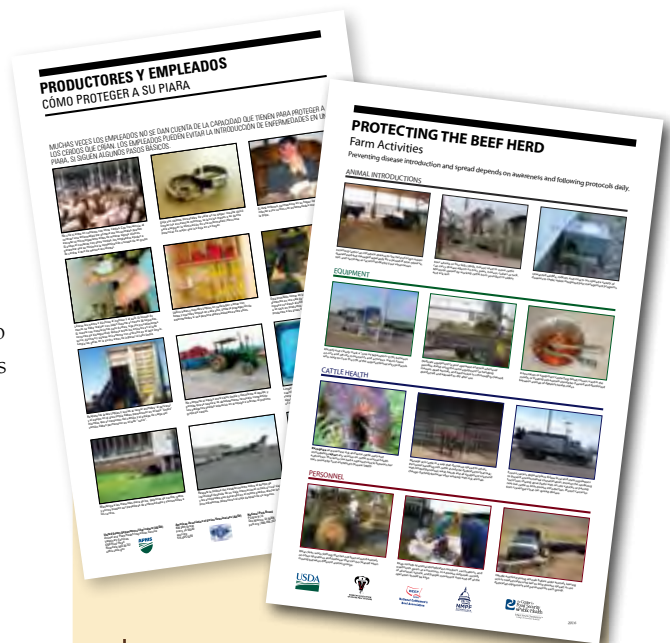
One resource is the free web-based Biological Risk Management (BRM) program found at [preventingdisease.org](http://preventingdisease.org). The BRM program allows veterinarians to assess their clients' beef or dairy operations and identify disease challenges specific to each situation. The program generates recommendations based on responses to a set of questions; recommendations can be prioritized. Reports, with practical management suggestions, are created within minutes.

The BRM program was designed by a team of veterinarians with busy practitioners in mind. The goal is to enhance the time spent discussing prevention with clients rather than hours writing reports. There are also infection control resources for veterinary clinics, swine and equine facilities. The BRM program was developed with funding from Centers for Disease Control and Prevention and Boehringer

Ingelheim Vetmedica, Inc. There are no product or treatment recommendations provided in the reports — that decision is left up to the veterinarian with the client relationship to determine.

The Secure Food Supply Plans are another resource. The HPAI outbreak in 2015 was devastating to many poultry producers in the Midwest. Breakdowns in biosecurity were identified as a risk factor for disease entry and spread. Operations that were not infected continued producing safe and wholesome eggs and turkeys for consumers. The movement of eggs and poultry from farms not infected was done under the guidance of the Secure Egg and Secure Turkey Supply Plans. Both are funded by USDA and veterinarians at CFSPH have been involved in their development. The CFSPH veterinary team developed enhanced biosecurity resources for the USDA in fall 2015. These can be accessed at [poultrybiosecurity.org](http://poultrybiosecurity.org).

Similar Secure Food Supply Plans are being created in the event of a foot and mouth disease (FMD) outbreak. The Secure Milk, Pork, and Beef Supply Plans provide guidance for producers and decision makers to ensure safe, wholesome milk and meat continue to reach consumers during an FMD outbreak. Biosecurity is a component of all the plans. Biosecurity to keep out a highly contagious disease like FMD can be expensive. It can be inconvenient. However, it may be the only way to prevent cattle and pigs from succumbing to this virus during an outbreak. **gd**



Swine, beef and dairy biosecurity posters are available in English and Spanish.

## BIOSECURITY INFORMATION

Biosecurity checklists and information manuals are being developed for dairy, swine, and beef producers to use with the assistance of their veterinarian. Guidance on how to develop site-specific plans are included. Colorful biosecurity posters are available that focus on daily biosecurity concepts, as well as enhanced steps that should be taken in an FMD outbreak. The beef and dairy posters were created by CFSPH in collaboration with the American Association of Bovine Practitioners, National Cattlemen's Beef Association, and National Milk Producers Federation with funding from USDA. The swine posters were created by CFSPH in collaboration with the American Association of Swine Veterinarians and the National Pork Board with funding from USDA. All are available in English and Spanish.

Visit the websites to find these biosecurity resources and learn more about the various Secure Food Supply Plans:

- [securemilksupply.org](http://securemilksupply.org)
- [securepork.org](http://securepork.org)
- [securebeef.org](http://securebeef.org)

# VMAA: Proudly Serving Alumni for Over 60 Years

By Dave Gieseke

Dr. Laurie Meythaler-Mullins ('08) doesn't hesitate when asked how the Veterinary Medical Alumni Association at Iowa State University makes an impact on the lives of alumni and students in the College of Veterinary Medicine.

Meythaler-Mullins rattles off the organization's support for college alumni events across the nation, the annual Homecoming luncheon and the Stange Award. But it's the student support that she says she is the proudest of.

Top on that list is the VMAA's financial support of the college's annual White Coat Ceremony where incoming first-year veterinary students are presented with a new white coat by a DVM to symbolize the beginning of the students' journey to becoming a veterinarian.

Meythaler-Mullins, the incoming VMAA president, says an email the organization recently received highlights how another, much smaller, benefit continues to resonate with veterinary medicine students long after they graduate from Iowa State.

"A recent graduate wrote to tell us about another classmate who was in a serious car accident," said Meythaler-Mullins. "At the time of the accident, the alumnus was wearing the sweatshirt that the VMAA gives out each year to second-year students.

"While the emergency responders were treating her in the ambulance, they had to cut off the sweatshirt and she told her classmate that the thing she regrets most about the accident was losing that sweatshirt."

Needless to say, the VMAA has sent a replacement sweatshirt to the alumnus.

Now in her fourth year on the VMAA Board of Directors, Meythaler-Mullins sees a multitude of benefits to membership. Not only does the organization provide activities and services to alumni and students, but it allows her and other members contact with alumni they may not have an opportunity to meet otherwise.

"Since I have been involved with the VMAA I have met so many colleagues that I wouldn't have normally associated with because either they don't work in the Des Moines area or didn't go to vet school when I did," she said. "My involvement has been a nice way to bridge some of the generational gaps.

"We have alumni all over the country and the world," she continued. "It's been a great way to not only stay in touch with people I went to school with but meet so many other great Iowa State veterinary medicine alumni."

During her one-year term of office Meythaler-Mullins hopes to increase the visibility of the organization.

"It's important that our membership stay active so we can continue to support the important events and projects we have over the years. The VMAA does so many wonderful things and our goal is to

make sure all of our alumni are aware of what we're doing," she said.

Significant changes will occur during the VMAA-sponsored alumni receptions at the annual AVMA Convention, as well as the Western Veterinary Conference in Las Vegas and the North American Veterinary Conference in Orlando. While past receptions were held in the convention hotels, future events will be off-site.

At the AVMA Convention in San Antonio this summer, the alumni reception will be held at Casa Rio Mexican Restaurant along the Riverwalk, in an effort to create a more festive atmosphere and attract additional participants. The reception will be held Monday, Aug. 8, from 7-9 p.m. **gd**



Dr. Laurie Meythaler-Mullins ('08), incoming VMAA President. Photo: Dave Gieseke

## VMAA Membership Dues Supports:

- Annual Homecoming BBQ at Vet Med
- Gentle Doctor Statues for the Stange Award Recipients
- Annual White Coat Ceremony
- ISU Alumni Receptions at AVMA, NAVC, WVC
- Student Scholarships
- VMAA Sweatshirts for Second-Year Students
- Lunch at the Annual IVMA Meeting
- Outstanding Service Award

Individuals wishing to join the VMAA may do so online at <https://vetmed.iastate.edu/alumni-giving/alumni/association>.



# Give 'em Enough Rope

By Fred Love

File Photo

Iowa State University veterinarians are refining a method of collecting diagnostic samples from swine that both pigs and producers are happy about, and all it requires is a little rope.

Dr. Jeff Zimmerman, a professor of veterinary diagnostic and production animal medicine, said taking individual blood samples from pigs to monitor infections imposes costs and time constraints on veterinarians and pork producers.

“The pigs aren’t happy about collecting blood samples, and neither are the people,” Zimmerman said.

He and some of his ISU colleagues began their experiments to find an easier means of collecting samples by hanging ropes in pens of pigs. The pigs enthusiastically chewed on the rope, leaving an oral fluid sample in the process.

The researchers began the project in 2005 as part of their work on porcine

reproductive and respiratory syndrome virus, one of the costliest diseases U.S. pork producers battle. Zimmerman said pigs instinctively chew on objects, including ropes hanging in their pen, as a means of exploring their surroundings. But the researchers didn’t know if the oral fluid samples left on the rope would allow them to track the infections they were interested in monitoring. As they refined the process, they learned that oral fluid samples can lead to diagnostic accuracy as good as, and usually better than, conventional surveillance techniques.

Zimmerman said oral fluid samples collected with rope can help veterinarians detect a wide variety of infections, including foot and mouth disease and classical swine fever. The technique is gaining wide acceptance among veterinarians and producers. The Iowa State University Veterinary Diagnostic Laboratory ran 10,268 oral fluid tests in 2010, but by 2015, that total jumped to 176,167. Producers in Europe, the Americas and Asia have

also begun to collect oral fluid samples. Zimmerman said testing oral samples saves producers money and avoids the difficulty of taking individual blood samples from pigs. He estimated the cost of testing for PRRS is between 3 to 12 cents per pig in the barn, depending on the kind of test used. By contrast, the cost of a PRRS virus outbreak in growing pigs can cost between \$7 and \$15 per pig.

The researchers have tested cotton, nylon and hemp ropes and found that cotton produces the best testing results. Growing pigs four weeks or older require no training for oral fluid collection, Zimmerman said. The rope proves irresistible to them due to their natural curiosity. For younger pigs, Zimmerman suggested that a rope be left on the floor of their pen for 30 minutes to allow the piglets to grow accustomed to it in a nonthreatening way before trying to collect samples. [gd](#)



# Just Keep Swimming

By Dave Gieseke



Photos: Christopher Gannon

A fixture in the College of Veterinary Medicine has received an upgrade.

A new aquarium dominates the aptly named Fish Tank Lobby in the college, replacing an aging structure that had been previously in the area for the past few decades.

The 350-gallon fish tank is double the size of the old aquarium. Throw in a 200-gallon sump tank and that's a lot of additional water.

The aquarium is filled with 175 freshwater fish with 18 schooling fish species represented.

"We did get a variety of different species that will live in different parts of the tank," said Samantha Ford ('17), president of the Aquatic Animal Medicine Club. "Some will even live in the sand."

The new fish are all native U.S. species, with a majority being Mississippi River fish. The largest fish should grow to between six and eight inches when it reaches adulthood. While the aquarium's filters will keep the tank clean, Ford says the Aquatic Animal Medicine Club will need to feed the fish daily and regularly test the water. Adam Crumpton ('16) worked with a Florida company to pick out the new fish. Crumpton has previously worked with the Shedd Aquarium in Chicago. "We have worked hard to make sure that we have not only fish that will get along, but by putting them into the aquarium at the same time they won't develop territories," Ford said.

The fish were shipped from an East Coast company and were transferred from their temporary baggie water home to the aquarium after a brief stay in the sump tank to acclimate them to their new water temperature. The Aquatic Animal Medicine Club then darkened the aquarium for the next

several days to allow the fish some time on their own before students, faculty and staff could start viewing them.

"By blocking the aquarium off, the fish had the opportunity to acclimate to their new surroundings and not have the stress of people staring at them," Ford said.

Algae has formed on the tank since its installation in early March. But Ford says students and faculty don't have to worry about the fish.

"They actually really like that environment," she said. "They thrive in it." **gd**

## FUNDING

Funding for the new Fish Tank has been provided by SCAVMA, Dr. Peter Bashara ('97), Dr. James Roth, Distinguished Professor of veterinary microbiology and preventive medicine; and the College of Veterinary Medicine. Aquallumination of Ames donated the lights for the tank.

## 2016 College Alumni Award Recipients Announced

On October 28, the college will present its alumni awards as part of the university's Homecoming activities.

The Stange Award, the college's highest award, is presented annually to alumni for outstanding professional achievement in the area of education, government, industry, practice or other professional endeavors in veterinary medicine.

This year's recipients of the Stange Award for Meritorious Service are:

- **Dr. Michael Conzemius ('90)**, an orthopedic surgeon with the University of Minnesota
- **Dr. Vincent Meador ('81)**, vice president of Covance
- **Dr. Donald O'Connor ('76)**, former epidemiologist with the state of Wisconsin

**Dr. James Stein ('75)** was selected to receive this year's Switzer Award in Veterinary Medicine which recognizes individuals who have made outstanding contributions to society and to the College of Veterinary Medicine. Stein is unable to attend this year's ceremony during Homecoming in October and will be presented the Switzer Award in 2017.



Photo: Christopher Gannon

## ONCOLOGY TOPIC OF 2016 ONE HEALTH LECTURE

Dr. Rod Page, director of Colorado State University's Flint Animal Cancer Center, was the guest speaker for the college's annual One Health Lecture held in April. His lecture, "One Health Oncology: Building the Tool Box for the Continuum of Cancer Care," highlighted the value of comparative oncology for basic discovery, prevention, therapy and trials for improvement of cancer care in all species. During his visit, Page toured the college, and its hospitals; and also met and exchanged ideas with college faculty and students. The One Health Lecture Series was established in the College of Veterinary Medicine in 2011, in honor of Dr. Roger Mahr ('71).



## DANIELSON APPOINTED INTERIM ASSOCIATE DEAN FOR ACADEMIC & STUDENT AFFAIRS

Jared Danielson, PhD, was recently appointed interim associate dean for academic and student affairs, replacing Dr. Claire Andreasen who served as associate dean since 2011.

Andreasen has been instrumental in leading development, oversight, and implementation of numerous student safety and educational practices and policies, and implementing current IT security policies.

Andreasen will continue to contribute to the college's teaching and service programs through her appointment in veterinary pathology. She'll also serve as the college's Director of One Health. Her prior multi-institutional grant

initiative experience; and work with the USDA, Department of Human Services, and the National Institutes of Health, will help move the college forward in this area.

Danielson joined the faculty at the college in 2002 as a lecturer, and rose through the ranks to associate professor. Previously, he was director of the Office of Curricular and Student Assessment. Danielson has an M.S. degree in Instructional Design, Development and Evaluation from Syracuse University, and a Ph.D. in Instructional Systems Development from Virginia Tech. He has published in several areas of veterinary medical education and assessment, including teaching and assessing diagnostic problem solving, impacts of educational technologies on learning, and predictors of success in veterinary college.

## ACCOLADES

**Dr. Jerry Hardisty ('71)** was recognized as a Distinguished Member of the American College of Veterinary Pathologists at its annual meeting held in Minneapolis, Minn., in October 2015.

**Dr. Delbert "Hank" Harris ('67)** was one of the 2016 recipients of Iowa State University's Distinguished Alumni Award in April. It is the highest honor given to alumni by the university's alumni association.

**Dr. Richard Martin**, professor of biomedical sciences in the College of Veterinary Medicine, was named a Clarence Hartley Covault Distinguished Professorship in Veterinary Medicine by Iowa State University.

**Dr. Lisa K. Nolan**, dean of the College of Veterinary Medicine, was presented with the Distinguished Alumni Award from the University of Georgia's College of Veterinary Medicine in March. Nolan is a 1988 graduate from UGA. She was also elected to Fellowship in the American Academy of Microbiology.

**Dr. Rachel Allbaugh ('04)**, veterinary ophthalmologist at the College of Veterinary Medicine, was a recipient of Iowa State's Outstanding Young Alumni Award.



# Congratulations, GRADUATES!

One hundred forty-three new doctors of veterinary medicine graduated from Iowa State University on May 7, 2016, bringing the total number of college alumni to over 7,500. The 2016 commencement speaker was Dr. Marcus Kehrl (82), director of the USDA National Animal Disease Center. Faculty marshals were: Drs. Darren Berger ('07) and Jennifer Schleining ('01); serving as hooders were: Drs. Amanda Fales-Williams and Brett Sponseller.



Schleining, president of the Iowa Veterinary Medical Association, also administered the Veterinarian's Oath to the graduates at the end of the ceremony. The reciting of the oath is a time-honored practice to remind the newly conferred doctors of their obligations.



Photos: Flash Photography

**IOWA STATE UNIVERSITY**  
**College of Veterinary Medicine**

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*Please join us in*  
**SAN ANTONIO**

for the Iowa State University  
College of Veterinary Medicine  
Alumni Reception

**Monday, August 8, 2016**  
**7-9 pm**

**Casa Rio Fine Mexican Food**  
**Veranda Party Room**  
**430 E. Commerce Street**  
**San Antonio, Texas**

Hosts: Dean Lisa Nolan,  
Amy Kruzich and Trent Wellman

Please RSVP at [bhuisman@iastate.edu](mailto:bhuisman@iastate.edu)

*Sponsored by:* ISU Veterinary Medical Alumni Association and the ISU College of Veterinary Medicine