

*gentle*doctor

WINTER 2017 | VOL.31 NO. 1



Right Place,
Right Time

IOWA STATE UNIVERSITY
College of Veterinary Medicine

gentledoctor

WINTER 2017 | VOL.31 NO.1

Gentle Doctor is published by the Iowa State University College of Veterinary Medicine for alumni and friends of the college. The publication of the magazine is funded by the College of Veterinary Medicine and the Veterinary Medical Alumni Association at Iowa State.

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Photo: Christopher Gannon

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Photo: Paul Gates

Dear alumni and friends,

The future is extremely bright for the College of Veterinary Medicine. As the nation's first public college of veterinary medicine, Iowa State has been at the forefront of countless research discoveries and educational innovations. The continued excellence of our faculty, staff, students and alumni will propel this college forward in the next decade and I believe we can go "From First to Best" and be recognized universally as the finest veterinary college in the world.

This is not a pie-in-the-sky goal. In the past few years the college has started to position itself to become the best. A next step towards that goal will be surpassing expectations for our October 2017 accreditation site visit by the AVMA Council on Education. We don't want to be just good enough, we want to be great in our visitors' eyes so they leave impressed with our capacity and trajectory.

To do this, we've been working tirelessly to ensure that our people have the best facilities in which to work, learn and grow in their careers. Such improvements help us recruit and retain the best faculty, staff and students.

Also, over the past three years, we have audited all our businesses taking a hard look at our procedures and processes in order to improve our efficiency and ensure that we are modeling best business practices to our students, treating our referring DVMs with respect and providing great care to our patients.

Further, we've conducted a comprehensive, data-driven review of our total professional curriculum and are now working towards optimizing the curriculum based on faculty and student feedback. And, we invited experts in veterinary medical education to conduct a mock accreditation site visit to identify things we are doing well and things that need improvement. Using input from the mock review, the audits and our curricular review, we are working to improve all that we do every day.

In regard to the official accreditation site visit, the college will be assessed against 11 wide-ranging criteria. These include organization, finances, facilities, clinical resources, information resource, student services, admissions policies and their implementation, numbers and quality of our faculty, the quality of our curriculum, the quality of our research program, and our ability to monitor the outcomes of our efforts.

Any additional feedback you might have on how the college can get ready for the accreditation visit is always welcome. We are looking for a community effort in making the official site visit a resounding success.

Best regards,

Lisa K. Nolan, DVM, PhD

Dr. Stephen G. Juelsgaard Dean of Veterinary Medicine

Iowa State University

Circumstances, Parental Influence and the

POWER OF SUGGESTION

By Tracy Ann Raef



*Nine-year-old Yuko Sato at the riding club, with her budgerigar (budgie), with her mother and her Java rice finch.
Photos: Yuko Sato*



On January 17, 1995, an earthquake measuring 6.9 on the Richter scale hit the island of Japan. The epicenter was located 40 miles from Kobe. It was the worst earthquake in Japan since 1923.

Born in Osaka, Japan, Dr. Yuko Sato was nine years old when the 1995 earthquake hit. Osaka, located 18 miles from Kobe, was impacted. “Everyone was in shock,” said Sato, poultry extension veterinarian at Iowa State University. “As therapy my dad took me to a facility where I could ride horses. I thought that was pretty cool and riding became my hobby.” For Sato, the horse riding helped regain a sense of normalcy. More surprisingly, it would be the initial catalyst for a career path she never imagined.

PARENTAL INFLUENCE

“In Japan, the educational system values uniformity,” Sato said. “My parents, though, were progressive thinkers who wanted me to be unique and make a difference. They knew the key to my success would be to be bilingual, and to continue my education, beyond the Japanese K-12 system.”

Sato went to Catholic school in Japan for 14 years, pre-school through high school. When she was 16, her parents sent her to summer school at the University of California, Los Angeles,

where she completed two semesters of coursework. At 17, she spent six weeks in class at UC, Davis.

When it was time for Sato to look for a college, she narrowed the field to U.S. colleges with equestrian teams so she could continue to ride horses. Ultimately she decided on Berry College in Rome, Georgia.

POWER OF SUGGESTION

Sato was on the wait-list for a job at the college’s horse farm, when her undergraduate advisor got her a job at the dairy barn. It was during that work experience when her advisor told Sato that she had enough credits to go to veterinary school. “It never occurred to me to become a veterinarian until my advisor suggested it. I’m an only child so my plan was to major in business and eventually take over my parents’ business. But I grew up in the city and was fascinated with agriculture so I pursued a degree in agricultural business.”

Sato entered veterinary college at Purdue University in 2008, and tracked food animal medicine with a focus on dairy medicine. During Sato’s fourth year of veterinary school, with graduation looming close, the job outlook wasn’t good. “It was 2012, and the economy had not rebounded from the Great Recession. I was going on a lot of job interviews.”

Sato was relaxing at her apartment pool, when her classmate, Dr. Dan Wilson, suggested that Sato look into a poultry residency program one of their professors, Dr. Pat Wakenell, was developing. “The program was not even approved yet, but Dan told Dr. Wakenell that I was interested.” Sato hadn’t considered poultry medicine, but was intrigued because of the consulting and business aspect of the field. “My dad does consulting, and I was always attracted to the idea of helping a company do better.”

Soon after that poolside chat, Sato interviewed with Wakenell for the residency position. A few weeks later, Sato got a telephone call from Wakenell offering her the residency.

“I was excited,” Sato said. “Dr. Wakenell took a gamble with me since I had no previous experience in poultry. She relied on my classmate’s recommendation, along with a couple of others. Now, because of her, I had a career path in poultry medicine.”

RIGHT PLACE, RIGHT TIME

After completing her residency and receiving a master’s degree, Sato came to Iowa State in August 2015. When she arrived on campus, Iowa State was playing a significant role in the response to the outbreak of highly pathogenic avian influenza. She would serve in a critical role.

As the university’s poultry extension veterinarian, Sato was busy working with state and federal officials, as well as answering questions from poultry owners with flocks of all sizes, serving those with large operations as well as owners of backyard chickens with a name.

“The outbreak allowed me to connect with a lot of people in Iowa, much more quickly than normal circumstances would allow,” Sato said.

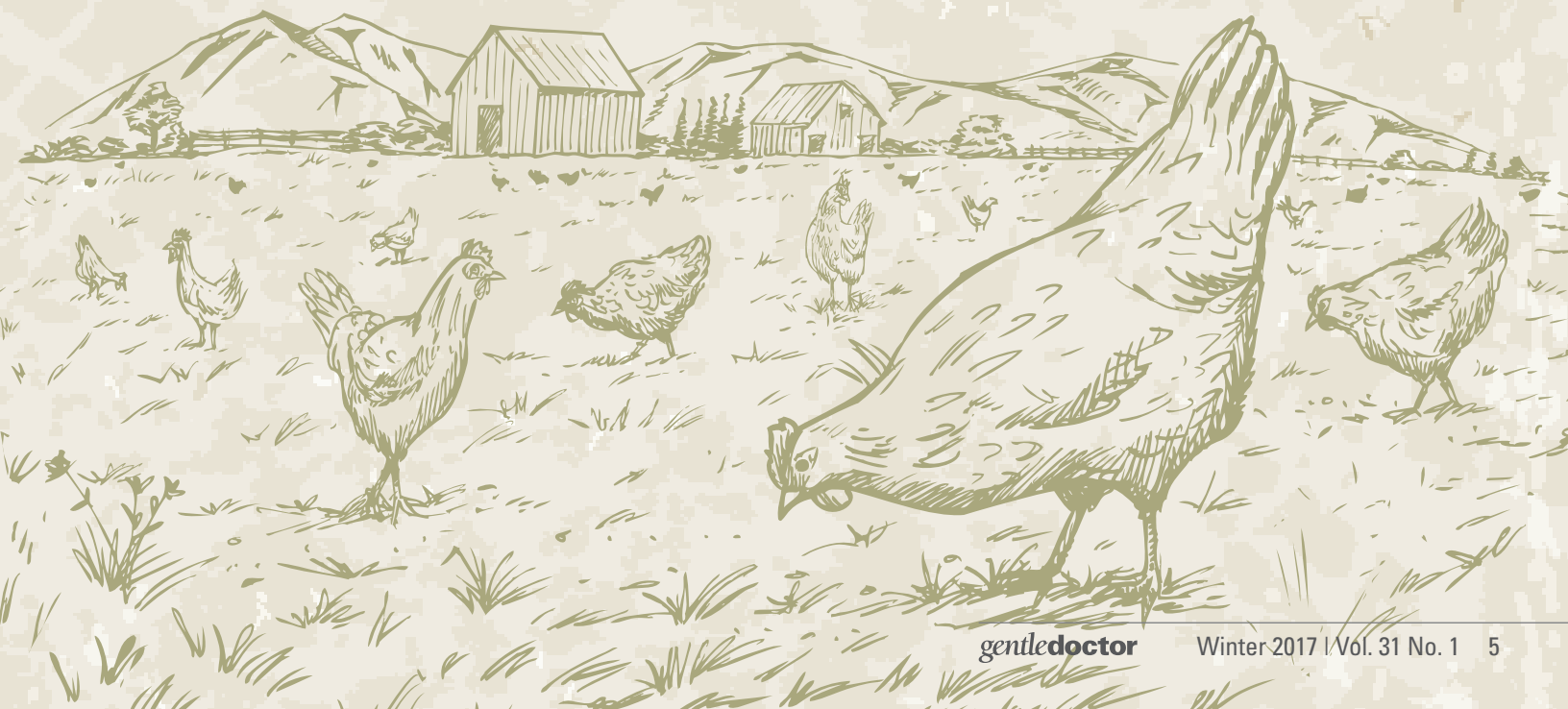
Now, Sato spends part of her time teaching poultry classes to undergraduate and veterinary students. To meet a growing interest in poultry medicine, Sato developed a clinical rotation for fourth-year veterinary students.

“During the two week-rotation, the students travel to poultry and turkey operations in Iowa and Minnesota, gaining experience in a variety of flock sizes and management systems.”

Sato also helps poultry producers develop successful animal disease management programs, focusing on early detection and prevention. Sato preaches biosecurity at the farm level. “We want producers to make it difficult for pathogens to get on their farm.”

In helping producers prepare for any future animal disease threat, Sato is making her mark on the nation’s poultry industry. It’s a long way from where a young Sato envisioned her future, but a career path that challenges her to be an agent of change. **gd**

Dr. Yuko Sato is an assistant professor in the Department of Veterinary Diagnostic and Production Animal Medicine. She is also board-certified by the American College of Poultry Veterinarians.



A Total Team Effort

By Dave Gieseke

The equine veterinary staff at the Lloyd Veterinary Medical Center have become quite familiar with D’Kela Sunrise almost since her birth last May.

The foal was born three weeks premature and has made several visits to Ames and the large animal hospital in her lifetime for various treatments. But it was a highly unusual surgical procedure and subsequent treatment that saved D’Kela’s life.

Two months after her initial visit to the Lloyd Veterinary Medical Center for failing to nurse well, the filly’s owner, Bethany Kinney, found her one evening bumping into the walls of her stall. She immediately brought D’Kela and the mare to the LVMC.

An examination by Drs. Brett Sponseller and David Suarez-Fuentes, on-call surgery resident, confirmed the worst – there was something

dramatically wrong. She would persistently circle in her stall. She had little to no vision in her left eye. And she would fall if not supported.

The filly was transferred to the equine medicine service under the watchful care of Dr. Rebecca Ruby, equine medicine resident.

The signs suggested a brain issue and antibiotics and anti-inflammatories had little or no effect on the filly’s condition.

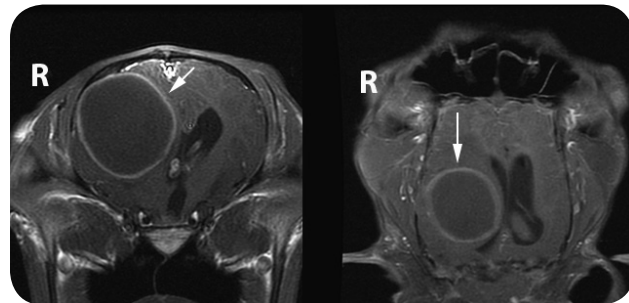
“When D’Kela failed to improve significantly over the first few days and finally started to show signs of seizures, her owner knew it was time to make a choice,” Sponseller said.

Kinney immediately agreed to continue the filly’s care with an advanced imaging of the brain.

But there were other, non-medical complications. It was early Sunday morning and the large animal hospital wasn’t at its normal weekday staffing levels. That didn’t matter as specialists starting pouring in to assist.

Anesthesiologist Dr. Jennifer Bornkamp was soon on site. Surgical technician Lisa Leake and anesthesia technician Stacey Johnson began the preparations. Dr. Elizabeth Riedesel analyzed

Magnetic Resonance images in transverse (looking front-to-back) and dorsal (looking top-to-bottom) planes through a section of the abscess in the right side of the brain. The arrows point to the outer rim of the abscess capsule. R designates the right side of the head.



the images from an emergency MRI performed by Samantha Schmidt. And fourth-year student Mark Duffy assisted with the filly’s care throughout the day.

Riedesel soon confirmed what was previously thought. An abscess took up almost 20 percent of the left side of the filly’s brain.

In Kinney’s mind, there was just one choice to make.

“The doctors advised me on the risks and told me surgery was really her last chance of survival,” she said. “I knew she was a fighter from day one, so there was no way I was going to give up fighting for her once she started having troubles.”

The team effort of taking care of D’Kela continued when neurology department members Drs. Nicolas Jeffrey and neurology resident Ilyssa Meren, arrived to perform the delicate surgery. The surgical team was supported by Drs. Kevin Kersh, Ruby and Suarez-Fuentes, along with veterinary technicians Amy Dennis and Tiffany Wilcox, who provided care before, during and after surgery.

The surgery required the veterinarians to make a small incision into the filly’s skull. Surgical equipment was inserted and used to carefully remove the material within the abscess. Six hours after going under

“This filly is a testament to what can happen when an owner’s commitment and a dedicated team come together to help save a life.”

– Dr. Brett Sponseller



August 2016

From left: Dr. Rebecca Ruby, Lisa Leake, Dr. David Suarez-Fuentes, and owner Bethany Kinney with D’Kela Sunrise and Denali. Photo: Dave Gieseke



October 2016

Photo: Bethany Kinney

anesthesia for the MRI, the surgical procedure was finished and D’Kela was recovering from anesthesia.

“This was the point where the future was truly unknown,” Sponseller said. “D’Kela had been unable to stand before surgery due to frequent seizure-like activity. We didn’t know when she woke up from anesthesia if she would show signs of improvement or not.”

Despite being under anesthesia for six hours, when the filly woke she was a different horse. Within an hour she was aware of her surroundings. Under the

watchful eye of students, staff and residents, by that evening she was able to stand, walk on her own and nurse from the mare.

“I remember walking into the hospital the next morning and seeing Dr. Suarez just shaking his head and saying ‘it was amazing,’” Kinney said. “When I walked into her stall and saw her I was overcome with so much emotion that all I could do was kiss her nose, tell her how much I loved her and cry.”

D’Kela soon returned home and Kinney reports the filly is growing like a weed.

“This filly is a testament to what can happen when an owner’s commitment and a dedicated team come together to help save a life,” Sponseller said. “If one person had said no or had not answered their phone on their day off, we might not have had such a happy ending.

“While this surgery is considered extremely rare to perform in large animals, it is equally as rare to have such a great opportunity for five of our hospital sections to be able to come together to save a very special life.” **gd**



One Health

By Dave Gieseke

When Dr. Claire Andreasen stepped down as the associate dean of academic and student affairs in the College of Veterinary Medicine she began life away from one of the most time-demanding jobs in the college.

Her new position will return Dr. Andreasen to a focus area that also continues to impact the future of the college and veterinary medicine in general.

As the director of the college's One Health initiative, Andreasen's focus has changed from working with academic and student issues on a daily basis to prioritizing her time to the enhancement of the health and well-being of animals and human beings.

"One Health has been a priority for the college for a long time and the college has a good foundation already built," said Andreasen, a professor of veterinary pathology. "My goal is to further the networking and collaboration between faculty and staff in our college with our colleagues not only at Iowa State University but at other universities and industry partners across the globe."

The College of Veterinary Medicine has a long history of engagement with One Health. The annual One Health Lecture, presented in honor

of Dr. Roger Mahr ('71) is held annually on campus each spring.

The college's curriculum supports the One Health initiative and the college has long standing collaborations to improve animal and human health.

But Andreasen says much more needs to be done in this area and she is working to bring researchers and investigators together.

"There are grand challenges ahead for us," she said. "We, as veterinarians or physicians or medical researchers, can't solve problems with just one discipline. We have to work to bring people together and help people make more connections.

"That is how the health and well-being of both animals and humans will be improved and enhanced."

Andreasen also is planning to assist and facilitate research teams who are applying for major grants including those from the National Institutes of Health.

The challenge of connecting College of Veterinary Medicine faculty with Iowa State researchers is more evident because of the increased number of new faculty members both in the college and at the university.

"We have to attempt to get people to talk and engage in common interests," Andreasen said.

Another challenge Andreasen and One Health faces is the visibility One Health gets among human medicine and medical researchers. While the initiative has been a priority of veterinary colleges across the globe, human medicine colleges have been slower to react.

"One Health just hasn't been emphasized as much in the human medicine curriculum as we have done in veterinary schools," Andreasen said. "But that's beginning to change as emerging diseases such as the Zika virus and West Nile have become more prevalent.

"The increased levels of transportation has changed the ability of these, and other diseases to move rapidly across the globe."

Andreasen believes great things can be accomplished with One Health at Iowa State.

"Every week there is something new happening in the area of One Health," she said. "We hope to build on our strengths and continue to move forward." **gd**

Bridging the Gap

By Tracy Ann Raef

Tyler Bunting decided on a major late in college, choosing biology with an emphasis in conservation and ecology. It wasn't until the final semester of his senior year when he realized he had a passion for the medical side of biology.

After researching different careers in the medical field, he quickly learned that the courses he had taken for his major weren't enough to pursue a medical career. Instead of giving up on his passion, Bunting searched for a path that would bridge the gap. The path he chose was the one-year, non-thesis, master's degree in biomedical sciences.

This unique program in the College of Veterinary Medicine is specifically designed to prepare students for a wide range of career pathways – whether that's preparation for a career in academia, industry or research, or preparation for professional school or PhD program.

The nine-month, intensive program started with 16 students, under the leadership of biomedical sciences department chair Anumantha Kanthasamy, PhD, and Richard Martin, DVM, PhD, department director of graduate education. Now, in its fourth year with 50 students, it's the only post-baccalaureate, pre-medical program in Iowa approved by the American Medical Certification Association.

"Eighty-seven percent of our students who apply to professional school are accepted," said Emma Hashman, coordinator of the master's program.

"We have graduates who are now in medical, dental, pharmacy and veterinary schools, and several who have enrolled in PhD programs."

Hashman meets with industry representatives to learn what skills those employers need and incorporates them into the program.

"I credited the knowledge that I learned in the first semester of the program with helping me get a job as a medical scribe," Bunting said. "The position will give me patient contact hours necessary for medical school admissions."

"We spend a lot of time reviewing our curriculum to make sure it includes the material and skills that help the program's graduates be successful whether in industry or professional school," Hashman says.

Third-year veterinary student Christina Collins ('18) is another program graduate. After getting a bachelor's in biology with a minor in chemistry, she wanted to further her education before veterinary school, and like Bunting, wanted some work experience before applying to professional school. Collins learned about the program from her



*Emma Hashman, coordinator of the master's program, discussing coursework with student Tyler Bunting.
Photo: Heather Brewer*

academic advisor and enrolled. "The courses in the program really prepared me for professional school," she said. "I had a much better foundation for many of my first-year veterinary courses than I would have going straight from undergraduate to professional school."

Preparing students for that first year of professional school is one of the reasons Hashman continues to review and improve the program. "Our program fills a unique gap that many programs don't," Hashman said. "Our students get a taste of what professional school will be like."

With courses geared toward both animal- and human-focused studies, program graduates are prepared to pursue a variety of careers.

"While the program is going to make me a competitive professional school applicant, it'll also increase the chances for excelling in medical school," Bunting said. "I give it 10 stars out of 10." **gd**

"87% of our students who apply to professional school are accepted."

– Emma Hashman

Dancing with the DEVILS

By Tracy Ann Raef



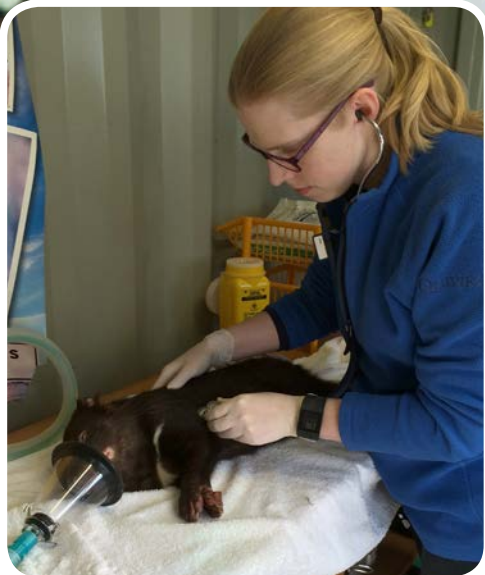
*Jessica Elbert ('18) draws blood from a wild Tasmanian devil during an annual monitoring trip to Woolnorth in northwest Tasmania.
Photo: Jessica Elbert*



It was her last free summer in veterinary school, and Jessica Elbert ('18) wanted to do something impactful. In the course of her studies, she had become extremely interested in transmissible cancers, especially devil facial tumor disease (DFTD).

Elbert couldn't think of a better way to spend the summer than working on this important disease. Not finding any summer research internships on DFTD, Elbert decided to make her own. She contacted the Save the Tasmanian Devil Program (STDP), based in Hobart, Tasmania (Australia), about doing an internship under their guidance, and devised a ten-week, self-directed internship.

In May 2016, Elbert flew to Tasmania for the summer. There, she worked with the program's veterinarians and researchers. "My time in Tasmania was extremely varied, ranging from conducting molecular biology work to aid in DFTD drug and vaccine development, assisting with general veterinary care with STDP's captive population of devils, to devising monitoring protocols for *Dasyurotaenia robusta*, an endangered cestode found only in Tasmanian devils," Elbert said. "I also participated in an extensive 10-day



*Jessica Elbert ('18) monitors a captive Tasmanian devil under anesthesia for routine veterinary care in Cressy, Tasmania.
Photo: Jessica Elbert*

monitoring field trip where we caught 110 devils and 20 quolls. That number doesn't include the multiple recaptures of animals that wanted the lamb bait day after day!"

During the field trip, Elbert and the researchers didn't detect DFTD in the area (a good thing), but "I enhanced my devil venipuncture skills and learned safe devil handling," said Elbert.

An admitted pathology enthusiast, Elbert most enjoyed time spent at the Animal Health Laboratory (AHL) in Launceston, Tasmania, which is the diagnostic pathology laboratory that services the state of Tasmania. Elbert worked closely with Dr. Jim Taylor, AHL's principal veterinary pathologist and ISU alum (M.S. Veterinary Pathology, 1980). "I was able to assist in postmortem and histological exams of animals ranging from redfin perch to neonatal lambs and calves, to

spotted-tail quolls, wallabies and Australian fur seals." Elbert also performed her first solo post-mortem on a Tasmanian devil, and discovered an olfactory bulb neoplasm in a devil which she is classifying for future publication with Dr. Jodi Smith, veterinary pathologist in the College of Veterinary Medicine.

"It was an incredible internship," Elbert said. "I had many diverse experiences, worked alongside fantastic individuals and learned a tremendous amount of information about DFTD and Tasmanian devils."

Elbert advises students, "If you have a passion about a particular topic or animal, and there isn't a formal internship or preceptorship, take the initiative to develop your own experience. It's well worth the effort." **gd**



Dean Lisa K. Nolan with the 2016 college award recipients (from left): Stange Award recipients, Drs. Donald O'Connor, Vincent Meador, and Michael Conzemius; and Switzer Award recipient, Dr. James Stein. Photo: Christopher Gannon

By Tracy Ann Raef

On Friday, Oct. 28, four alumni of the College of Veterinary Medicine were honored for their outstanding achievements on Homecoming Weekend in Ames, Iowa. Recipients of the Stange Award for Meritorious Service and the William P. Switzer Award in Veterinary Medicine were recognized at an all-college breakfast at the Gateway Hotel, and later at the university awards ceremony at Scheman Building. The awards were presented by Dr. Lisa K. Nolan, professor and Dr. Stephen G. Juelsgaard Dean of Veterinary Medicine.

Dr. Donald Paul O'Connor
 South Wayne, Wis.
 Stange Award Recipient

Dr. Donald O'Connor, retired epidemiologist, played a significant role in the state of Wisconsin's animal disease control and eradication efforts for 25 years. As an epidemiologist involved in regulatory veterinary medicine, O'Connor successfully faced the challenge of protecting the state's animal population from infectious diseases.

Having spent the first 10 years of his career as a dairy practitioner, O'Connor

left his successful practice to become Wisconsin's epidemiologist, managing a myriad of animal health and disease control programs affecting a range of industries: equine, poultry, cervid, cattle, and swine. He is credited with developing several of Wisconsin's programs, including its rabies program, chronic wasting disease program, the poultry avian influenza and salmonella programs, and equine infectious anemia program. He was a member of the team of veterinarians who developed the current USDA bovine tuberculosis program for cervids, which has been adopted as the standard for the nation. Under O'Connor's direction, Wisconsin was one of the first states to eradicate pseudorabies from its herds. He also assisted the USDA in training pseudorabies epidemiologists at the national level.

"Doc's scientific, no-nonsense approach to solving each of these disease situations in Wisconsin will forever be remembered as a remarkable achievement for one man's career in regulatory government," one nominator said.

O'Connor graduated from Iowa State with a master's degree ('72) and doctor of veterinary medicine ('76).

Dr. Vincent Phillip Meador
 Seattle, Wash.
 Stange Award Recipient

Dr. Vincent Meador, owner of Pacific Tox Path, LLC, and affiliate professor at the University of Washington, is an expert in toxicologic pathology, contributing to the technology transfer of research information and international control programs for preclinical drug safety.

His unique skill set that combines expertise in anatomic, clinical, and ultrastructural pathology with clinical practice has given Meador a deep insight into integrating and interpreting data throughout the pharmaceutical drug development process. Recently, he has been instrumental in building and staffing a toxicology laboratory in Shanghai, China, and leading evaluation teams for several toxicology facilities in China.

Prior to founding his own company, Meador was vice president and global head of pathology at Covance/LabCorp, a global contract research organization that is the world's most comprehensive drug development company. He also was the executive director of comparative biology and safety assessment at Amgen for three years, and director of

toxicology and pathology at Eli Lilly and Company for 12 years. His early career included pathology positions in government and industry. He was a private veterinary practitioner for two years. Meador is board-certified in both anatomic and clinical pathology by the American College of Veterinary Pathologists.

Throughout his career, Meador has trained and educated some of the best veterinary pathologists. One of the mentoring programs bearing his handprint was initiating employment of disadvantaged persons while he worked at Eli Lilly. In this program, individuals with intellectual and developmental disabilities were employed doing necessary jobs commensurate with their abilities – such as labeling test tubes, delivering mail, and stocking supplies.

Meador earned his DVM ('81), MS ('86) and PhD ('88) from Iowa State.

Dr. Michael G. Conzemius
Chanhassen, Minn.
Stange Award Recipient

Dr. Michael Conzemius, Tata Group Endowed Professor of Surgery and director of the Clinical Investigation Center at the University of Minnesota College of Veterinary Medicine, is an internationally recognized researcher in orthopedic biomechanics and joint injury and treatment.

Conzemius is a board-certified veterinary surgeon who is an expert in osteoarthritis, fracture osteomyelitis, biomechanics of osteonecrosis, and stem cell therapy for cartilage injury and repair. Most impressive are the translational aspects of his research efforts, which have advanced the knowledge of the similarities of joint injury between animals and humans. As director of the Clinical Investigation Center, his group is focused on clinical trial studies in veterinary and human medicine.

He has been honored by the American College of Veterinary Surgeons, the Veterinary Orthopedic Society, the American Society of Biomechanics, and is the recipient of the Pfizer Award for Research Excellence. He was also elected by his students as the faculty representative for the College of Veterinary Medicine's 2015 White Coat Ceremony. In addition to his honors and awards he holds several patents, including two for a canine total elbow implant.

Active in organized veterinary medicine, Conzemius serves as a resident and graduate student mentor, grant reviewer, and scientific editor for international and national publications.

Prior to joining the faculty at the University of Minnesota in 2006, he was an associate professor at Iowa State and an assistant professor of surgery at the University of Pennsylvania, where he completed his surgical residency program.

He received his DVM ('90) and PhD ('00) from Iowa State.

Dr. James Philip Stein
Muscatine, Iowa
Switzer Award Recipient

Early in his career, Dr. Jim Stein made a lifetime commitment to improving the lives of others, beginning with the veterinary clinic that he and a classmate established in a Wisconsin town that lacked veterinary services for pets and livestock. After seven years he returned to his hometown to help his father.

Back home, Stein became the go-to person for counsel, leadership, and participation in community projects. He was a lead partner in a successful effort to create a locally owned and driven shelter for domestic violence victims. He and wife, Tammy, were campaign leaders for the Salvation Army of Muscatine. He has been

president of the Rotary Club of Muscatine and a Rotary assistant governor. Stein was instrumental in the development and building of the community's new YMCA/YWCA. He serves on the board of directors of the Community Foundation of Greater Muscatine, the Hoover Presidential Library Association, and the Iowa Nature Conservancy. Stein's leadership in the development of the Muscatine Ag Learning Center provides local students with a modern facility where they can gain exceptional experience in animal husbandry and management.

Since graduation, he has been a loyal and avid supporter of the College of Veterinary Medicine, serving on its fundraising advisory council, providing scholarship support to future veterinarians, and contributing to the Lloyd Veterinary Medical Center.

While devoting countless hours to community service, Stein continues as chairman of the board of directors of Central Bancshares. From 1982 to 1990, he worked part-time as a clinician in a local veterinary clinic; from 1990 to 2014, he was a part-time practice consultant in dairy production management.

Stein graduated in 1975 with a doctorate of veterinary medicine. **gd**

Stange Award for Meritorious Service

The award is co-sponsored by the Veterinary Medical Alumni Association at ISU and presented annually. The award recognizes alumni for outstanding professional achievements. It is the highest award given to alumni of the College of Veterinary Medicine.

William P. Switzer Award in Veterinary Medicine

Established in 1998, the award recognizes exemplary individuals who have made significant contributions to the enhancement of the College of Veterinary Medicine and society.

Introducing Deanna Gerber



Photo: Tracy Ann Raef

There's that saying, "You learn something new every day." These days, I'm up to about 10! I'm excited to introduce myself as the new recruitment coordinator for Iowa State University's College of Veterinary Medicine. New to Iowa State, veterinary medicine, and Ames, each day is a new adventure for me. My background is working with high school and undergraduate students so I'm in my element when I'm talking with prospective veterinary students and their families.

Some of my duties will include being the point person for prospective students interested in touring our college and the Lloyd Veterinary Medical Center; providing outreach to various organizations ranging from 4-H to the Iowa State pre-vet club; and welcoming our applicants coming for interviews. I also will be the liaison to prospective students from our contract state schools (North and South Dakota, and Connecticut) and Nebraska. I'm eager to develop new ways to connect with students who dream of becoming veterinarians. I'm looking forward to traveling and meeting potential students everywhere I go!

One of my favorite experiences the past four months at the college has been our

interview weekends. Meeting outstanding candidates for the class of 2021 has been an honor. Hearing about their passion for veterinary medicine is inspiring. Our hopefuls have been impressed with our program and facilities but most importantly they've gotten a sense of our hospitality and authenticity from our students, faculty, and staff. I hope to see many of these candidates back here in the fall as veterinary students.

Whether I'm greeting visitors, talking with a group of pre-vet students, or at a career fair, I'm eager to share all that makes Iowa State's College of Veterinary Medicine the place to be. If you know a student who's interested in becoming a veterinarian, please don't hesitate to reach out to me. I'm also happy to share the materials we've developed with you for presentations that you may give to grade school, high school or college audiences.

If you have questions about our recruitment activities, or would like to get involved as an interviewer or presenter, please don't hesitate to contact me.

Go Cyclones!

Deanna Gerber
Recruitment Coordinator

CONTACT

Please direct any recruitment questions to:

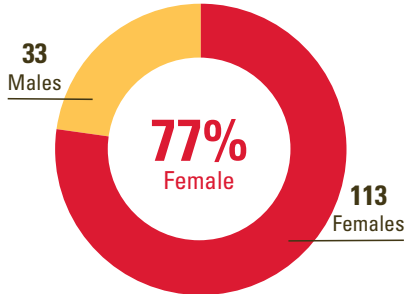
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Recruitment Coordinator
dgerber@iastate.edu



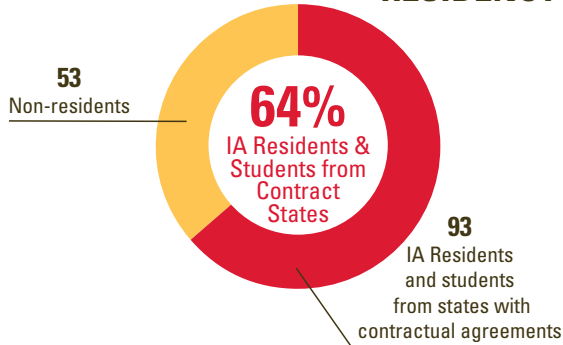
FAST FACTS

Class of 2020

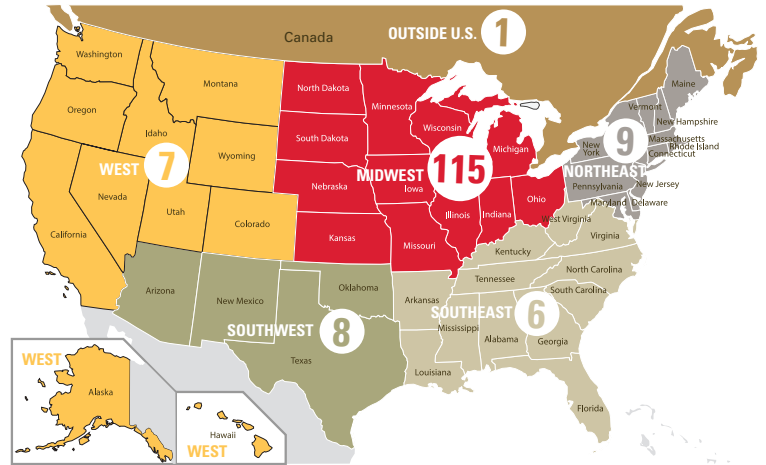
GENDER



RESIDENCY



146 Students Enrolled

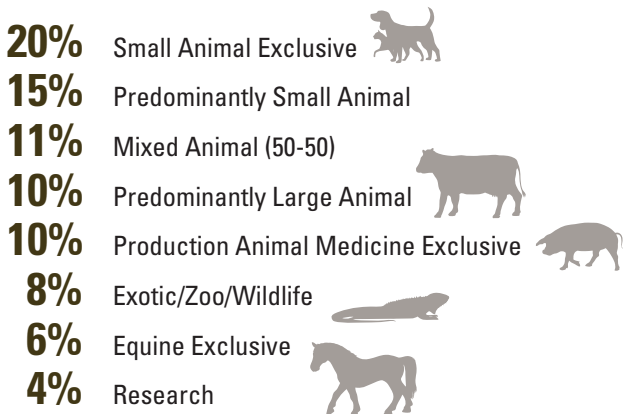


Home Regions

Students from the Class of 2020 come to the College of Veterinary Medicine from a wide range of geographic regions

Primary Interests of Class of 2020

as stated on their application



16% Undecided/No Response

19 Academic Studies

- Agribusiness Management
- Animal Ecology
- Animal Science
- Bioethics
- Biology
- Biological Sciences
- Biomedical Sciences
- Chemistry
- Dairy Science
- Education
- Engineering
- Genetics
- Life Science
- Microbiology
- Psychology
- Religion
- Veterinary Science
- Veterinary Technology
- Zoology

Highest Advanced Degree Earned



SCHLEINING RECEIVES ARMBRUST PROFESSORSHIP

By Tracy Ann Raef

Dr. Jennifer Schleining has been named the Scott and Nancy Armbrust Professor at Iowa State University's College of Veterinary Medicine. The professorship medallion was presented to Schleining by Dr. Lisa K. Nolan, dean of the veterinary college in a fall ceremony. Schleining is an associate professor and board-certified large animal surgeon at the Lloyd Veterinary Medical Center.

After graduating from Iowa State in 2001 with a doctorate of veterinary medicine, Schleining completed an equine surgical and internal medicine internship in Gilbert, Ariz. She returned to her home state of South Dakota to practice mixed animal medicine, prior to completing a second internship in equine surgical and internal medicine in Scottsdale, Ariz. She went on to complete a large animal clinical fellowship at Oregon State University's Louis Bates Acheson Veterinary Teaching Hospital, prior to completing a residency in large animal/equine surgery at Iowa State. Schleining received a master's degree from Iowa State in 2009.

Active in organized veterinary medicine, Schleining is the immediate past president of the Iowa Veterinary Medical Association and chair of the farm animal program for the American College of Veterinary Surgeons annual Surgery Summit. She is also active in the American Association of Bovine Practitioners, the American Association of Equine Practitioners, and the American Veterinary Medical Association.

Schleining was the 2014 recipient of the William O. Reece Award for Outstanding Academic Advising, and named a 2014 Miller Faculty Fellow, both at Iowa State. In 2013, she received the Clinical Sciences Teaching Award by the Iowa State student chapter of the American Veterinary Medical Association.

"I am extremely honored to be recognized with this professorship," Schleining said. "Having previously worked with Dr. Armbrust and his wife, Nancy, through the development of our college's Clinical Skills Laboratory, I learned first hand our shared dedication and love of the veterinary profession and for veterinary education. This professorship will allow me to advance my skills in both of these areas as we continually strive to make the food animal program at Iowa State University the best program in the country."



First-year students Jacob Baker and Kimberlee Baker discuss orthopedic plates with Dr. Jennifer Schleining. Photo: Heather Brewer

ARMBRUST PROFESSORSHIP

The Scott and Nancy Armbrust Professorship was established by the Armbrusts in 2006 to advance the field of bovine production medicine and/or bovine reproduction. After graduating from Iowa State's College of Veterinary Medicine in 1975, Armbrust was a dairy practitioner in Wisconsin for seven years. When he graduated, the technology of bovine embryo transfer was in its infancy. He was one of the first veterinarians in Wisconsin to practice embryo transfer exclusively. He is internationally recognized for his expertise in bovine genetics and embryo transfer. Since 1982, he has owned and operated Paradocs Embryo Transfer, Inc., which markets and exports U.S. bovine genetics worldwide.

Nancy Armbrust graduated from Iowa State in 1973 with a bachelor's degree in food science. She retired from Schreiber Foods, Inc., as vice-president of Education and Community Relations.

The Armbrusts reside in Green Bay, Wisconsin, and are actively involved with the Iowa State University Foundation.

VET MED FARRIER EARNS NEW CERTIFICATION

By Tracy Ann Raef

In October, the United Kingdom-based Worshipful Company of Farriers held the examination for Associate-level certification in Lexington, Ky. Among the two passing the certifying examination was Doug Russo, journeyman farrier at the Lloyd Veterinary Medical Center.

Russo is only one of two farriers employed at the U.S. veterinary colleges who has earned the certification of Associate from the Worshipful Company of Farriers (WCF). There are only 18 others in the United States who also hold that title.

In the United States, says Russo, the (highest) credential is certified journeyman which is equivalent to the WCF's Diploma status. Associate status is the next higher level at the WCF. The exam tests a wide range of therapeutic shoe-forging skills and the farrier's ability in remedial or consultancy shoeing.

"We are so proud of Doug for this accomplishment," said Dr. Stephanie Caston, equine surgeon at the Lloyd Veterinary Medical Center. "The WCF is regarded as having the highest standards in farrier examinations; the rigorous and comprehensive testing is quite a challenge. Completion of this certification is an important achievement. To have such a dedicated and knowledgeable farrier on staff at Iowa State is a vital resource and a huge benefit to clients, veterinary students, farrier students, and all of the equine clinicians."

Russo wasn't planning to take the certifying exam this year, but a fellow farrier was injured in an accident and offered his exam spot to Russo. With two months to prepare, he wasn't sure he'd be ready.

"Working at the Lloyd Veterinary Medical Center helped me prepare," Russo said. "A lot of the examination tests a farrier's ability to read radiographs and ultrasounds, and identify pathologies. It also assesses your knowledge of anatomy, and conditions and diseases of the equine leg and foot; as well as the farrier's ability to use modern materials in shoemaking."

"The exam also involves testing the farrier's ability to assess a case that he or she has never experienced and working with veterinary surgeon," Russo said. "That's where working with Drs. Stephanie Caston and Kevin Kersh (equine surgeons at Iowa State) truly helped me prepare and review for the exam."

"Drs. Caston and Kersh always made themselves available to me while I studied, their help along with the support of college helped me achieve this goal," Russo said. "I'm fortunate to work with this team!"

"It was a very stressful two months of prep for the Associate exam, but the process forces you to become a better farrier through the review and practice that you do to prep for it."



Photo: Christopher Gannon

The United Kingdom is the only country to require a license to be a farrier, says Russo, and the long history of farriers in the UK dates back to the early 1300s.

Now that Russo has earned the Associate level, he plans to take the examination for Fellowship in another year. The Fellowship recognizes the highest level of ability. There are only six farriers in the United States who are Fellows.

Russo traveled to London, England, in January for the WCF ceremony where he received his Associate certificate.

PITTMAN RECEIVES VET MED SCIENCE WITH PRACTICE AWARD

Jeremy S. Pittman, DVM, received the Science with Practice Award from the College of Veterinary Medicine. The award, presented at the James D. McKean Swine Disease Conference in Ames, recognizes exemplary integration of science and the art of veterinary practice to benefit swine productivity and welfare.

Since 2004 Pittman has been a staff veterinarian at Smithfield's Hog Production Division, managing 105,000 sows farrow-to-finish in North Carolina, Virginia and Pennsylvania. He also serves on Smithfield's science and technology committee whose mission is to provide science-based solutions to improve production, health and business performance throughout Smithfield's operations.

"Jeremy's dedication to understanding how to optimize animal health and welfare along with his passion for teaching the next generation of swine veterinarians made him an obvious choice for this award," said Chris Rademacher, DVM, ISU swine extension veterinarian and chair of the conference committee.

In 2004 Pittman graduated from North Carolina State University College of Veterinary Medicine. He earned a master's degree in veterinary preventive medicine from Iowa State in 2014. He recently completed the Executive Veterinary Program at the University of Illinois.

Pittman is a Diplomate of the American Board of Veterinary Practitioners (Swine Health Management) and an adjunct faculty member at NCSU's College of Veterinary Medicine.



From left: Dr. Chris Rademacher, ISU swine extension veterinarian, presents the 2016 Science with Practice Award to Dr. Jeremy Pittman.



Got News?

Now that we've shared our news, please share your news with us?

Let us know if you've received an award or honor.

Please send news to Tracy Ann Raef: traef@iastate.edu

Congratulations!



Dr. Mary Kay Hilmoe, ('85) received the 2016 Washington State Veterinarian of the Year. The award was presented at the Washington State Veterinary Medical Association annual conference in Spokane.

Hilmoe has provided more than 30 years of compassionate care to Seattle area pets and has many loyal clients. Her main interest lies in internal medicine, geriatric medicine, and preventative healthcare. She has served for over 20 years on the continuing education committee of Seattle King County Veterinary Medical Association.

Hilmoe is a staff veterinarian at The Family Pet in Seattle, Wash. She lives in Seattle with her husband and has two grown children. She has achieved the level of third-degree black belt in karate. Hilmoe is an active member of Ballard First Lutheran Church.

NEW PROGRAM DRAWS UNDERREPRESENTED STUDENTS TO CAREERS IN TOXICOLOGY

By Fred Love

A new effort led by an Iowa State veterinarian kicks off this semester to mentor undergraduate students from underrepresented populations with an interest in toxicology.

The semester-long program, a collaboration with Tuskegee University and the Ohio State University and funded by a grant from the National Institutes of Health, will link undergraduate students with aptitudes in science and mathematics with professional toxicologists in academia, government and industry.

Dr. Wilson Rumbelha, a professor of veterinary diagnostic and production animal medicine and certified toxicologist, said the Toxicology Mentoring and Skills Development Training Program is a proof-of-concept project aimed at encouraging students from underrepresented communities to consider careers in toxicology.

"We want to create a pipeline of underrepresented groups into the workforce as toxicologists," Rumbelha said. "The profession of toxicology and the nation as a whole benefits from a more diverse workforce."

A total of 15 undergraduates, including eight from Iowa State and seven from Tuskegee University, will participate in the initial semester of the program, which began with a three-day workshop at Iowa State in mid-January.

Rumbelha said the students met their mentors, and toured the laboratories

and toxicology facilities at the College of Veterinary Medicine during the event. They also attended presentations and met ISU faculty and graduate students.

Faith Gaye, a junior at Iowa State studying kinesiology and health, said she hadn't considered a career in toxicology until she learned about the program, but the opportunity for mentorship drew her to join.

Gaye, a graduate of Hoover High School in Des Moines, participated in Science Bound, an ISU program that empowers high school students of color to pursue degrees and careers in STEM-related fields, before starting at Iowa State.

She said she's had an interest in biology for years, and she hopes the mentorship she receives in the toxicology program will prepare her to mentor younger women who want to study scientific disciplines in the future.

"As a woman of color, I hope other women like me can see a program like this and want to get involved," Gaye said. "I hope they think, 'If she can do it, I can do it, too.'"

Program participants will complete online coursework related to toxicology, attend a major toxicology conference in Baltimore in March and travel to their mentor's place of work for a one-on-one job shadow. They also will present at a capstone event at Tuskegee University. Rumbelha said the online coursework modules designed specifically for the program also will become available to the public as a means of increasing the visibility of toxicology.

"Currently, there are few opportunities to expose undergraduates to toxicology, and we want to change that," he said.

Rumbelha said the program will continue during the next academic year, during which it will cover two full semesters. He said he'd like to expand the program to include more schools and institutions in the future.

He said underrepresented populations, which often include communities of color, recent immigrants and economically disadvantaged people, experience environmental toxicants at a disproportionately high frequency. It's important for these students to enter the discipline and work toward solving the problems, he said.



Faith Gaye, an ISU junior in kinesiology and health, will take part in a semester-long program aimed at encouraging undergraduates from underrepresented populations to pursue careers in toxicology. Photo: Christopher Gannon.

IOWA STATE UNIVERSITY

College of Veterinary Medicine

Ames, Iowa 50011

Return Service Requested



February 2017

North American Veterinary Conference Alumni Reception

Tuesday, February 7
Itta Benna Restaurant
Mississippi Room
9101 International Drive in Pointe Orlando
Suite 2210
Orlando, Fla.
7:00 p.m. to 9:00 p.m..

March 2017

Western Veterinary Conference Alumni Reception

Monday, March 6
Mandalay Bay Resort and Casino
Palm A, Level 3
3950 S Las Vegas Blvd.
Las Vegas, Nev.
7:30 p.m. to 9:30 p.m.

One Health Lecture

Tuesday, March 21
College of Veterinary Medicine
Ames, Iowa
Speaker: Dr. Laura H. Kahn
Program on Science and Global Security
Princeton University
5:00 p.m.

April 2017

CVM Scholarship Recognition Program

Thursday, April 6
Iowa State University
Alumni Center
Ames, Iowa
7:00 p.m.

May 2017

CVM Commencement

Saturday, May 6
Stephens Auditorium
Ames, Iowa
12:00 p.m.

2017