

IOWA STATE UNIVERSITY

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COLLEGE OF VETERINARY MEDICINE SUMMER 2024 | VOL. 38 NO. 1



VDL PHASE 1 COMPLETE

PAGE 10



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Photos: Christopher Gannon

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From the Dean

Dear Colleagues and Friends,

Over the past year, the College of Veterinary Medicine has worked to create a new strategic plan, mission and vision. We have engaged with alumni, students, faculty, staff, and stakeholders to develop this important document.

Develop – Discover – Deliver focuses on what we as a college aspire to. It's as simple as this...

- **Develop** the next generation of veterinarians and scientists
- **Discover** solutions to important animal and human health questions
- **Deliver** innovative animal health services to the people of Iowa, the U.S. and the world

Just as importantly, we have developed a series of points on *How We Operate*. These values will be key in our day-to-day activities and reflect the important values as we continue to drive forward in our missions. These include:

- Uphold an inclusive, respectful and collegial community
- Cultivate partnerships and collaborations that support research, education and service
- Support innovation and entrepreneurship
- Provide proactive thought leadership on animal and human health challenges and opportunities
- Encourage grassroots efforts
- Be stewards of finite resources
- Strive for excellence

As a college, we have been living these values for many years. One shining example of how we deliver on our missions using the values we aspire to is the Veterinary Diagnostic Laboratory.

For decades, the VDL has been recognized globally as a leader in veterinary diagnostic medicine, especially in the support of animal agriculture. That designation will only be enhanced with the recently completed first phase of the new facility and in 2026 when the second and final phase is completed. The work being conducted within the VDL's walls have and will continue to set the standard for veterinary diagnostic excellence.



The work the VDL does every day impacts animal health, public health, agriculture economics and food security in Iowa and beyond. It is also a hub of innovation in animal diagnostic medicine. Whether it is developing a new diagnostic test or innovative diagnostic strategy, providing real time surveillance data to monitor disease spread across counties, states or countries, or discovering a novel pathogen, what separates this diagnostic laboratory from most others is the discovery that occurs in parallel to day-to-day diagnostic work. And finally, it serves as a “living laboratory” to train the next generation of veterinarians and scientists in the art of diagnostic medicine.

Throughout the College of Veterinary Medicine, faculty, staff and students are working to make the college a preeminent institution recognized for excellence in professional and graduate education and the application of knowledge to promote animal and human health. This issue of the *Gentle Doctor* tells stories of working toward that goal – from our efforts in **developing** the next generation of rural, large animal practitioners to the **discoveries** in our VDL to our faculty, staff, students and alumni **delivering** differences not only in the college but throughout the world.

Dan Grooms, DVM, PhD

Dr. Stephen G. Juelsgaard Dean of Veterinary Medicine

Grooms Reappointed Dean

Dr. Dan Grooms, Dr. Stephen G. Juelsgaard Dean of the College of Veterinary Medicine, has been appointed to a second five-year term.

Grooms, who began his tenure as dean in 2018, has significantly grown the college revenue during his first term, including a 50 percent increase in research funding, and support to Iowans through the Lloyd Veterinary Medical Center and Veterinary Diagnostic Laboratory. He has also doubled private funding for student scholarships, increased enrollment in the DVM program, secured funding for the new VDL, and helped the college, university and state navigate the pandemic.

“Under Dean Grooms’ leadership, the College of Veterinary Medicine continues to excel as one of the best in the world,” said ISU President Wendy Wintersteen. “Dan is doing an outstanding job working with students, faculty, staff, alumni, and stakeholders to grow the college, support livestock and poultry producers, and serve the state’s veterinary needs.”

“It’s an incredible honor to continue serving our veterinary students, our faculty and staff, and our alumni and stakeholders,” said Grooms. “Even more than that, every Iowan benefits from the College of Veterinary Medicine, and we are proud to serve the state and its animal and public health needs.”



Patterson Hall

The College of Veterinary Medicine held a naming ceremony in early October for the Dr. Frederick Douglass Patterson Hall. The new name honors Dr. Patterson, a 1923 DVM graduate, and former president of Tuskegee University. Photo: Christopher Gannon

LVMC Moves Forward with Two Construction Projects

Planning is underway to expand two areas in the Lloyd Veterinary Medical Center.

The Board of Regents has approved the two projects including a request to renovate more than 3,600 square feet and build a 2,000 square-foot addition to the ISU Pet Cancer Clinic.

The \$7 million project, which will be adjacent to the current radiation therapy addition in the Hixson-Lied Small Animal Hospital, will help the College of Veterinary Medicine to grow net fee-for-service revenue, better position the college to compete for funding, and efficiently execute clinical research trials while enhancing the hospital’s capacity to address Iowa’s pet population’s much-needed and growing care needs.

“This facility will not only allow us to continue to provide outstanding care to patients with cancer and potentially expand those services, but it also will really enhance our teaching enterprise as well as our research enterprise,” said Dr. Dan Grooms, the Dr. Stephen G. Juelsgaard Dean of Veterinary Medicine.



The second project will expand the Large Animal Hospital.

The \$12 million project will be funded by private gifts and university funds and increase the size of the Large Animal Hospital by over 17,000 square feet.

The expansion will occur over three phases and will expand reproductive services for horses and equine sports medicine services in response to the growing equine industry in Iowa. The project will also enhance DVM student and resident training.

Phase 1 will include additional equine ICU stalls, reproductive services, a feed and bedding storage, and shared storage. The second phase will include an advanced reproductive technology laboratory while the final phase includes plans for an equine rehabilitation area.



Photos: Christopher Gannon

CVM Continues to Rise in QS Rankings

For the third straight year, the College of Veterinary Medicine has risen in the Quacquarelli Symonds (QS) rankings.

The 2024 ratings of the world’s best veterinary schools by the British organization measures academic and employer reputations and the number of times faculty research papers have been cited by other researchers.

In 2024, the CVM was ranked 13th overall in the world rankings, seventh among U.S. veterinary schools and first among Big XII veterinary schools.



Faculty Notes

- **Dr. Matt Brewer**, the Dr. Frank K. Ramsey Endowed Chair and associate professor of veterinary pathology, has been selected to serve on the advisory board of the National Center for Veterinary Parasitology. 
- **Dr. Terry Engelken**, professor of veterinary diagnostic and production animal medicine, is the recipient of the 2023 Mentor-of-the-Year Award from the American Association of Bovine Practitioners. 
- **Dr. Dan Grooms**, the Dr. Stephen G. Juelsgaard Dean of Veterinary Medicine, has been named a Distinguished Fellow of the National Academies of Practice (NAP) in Veterinary Medicine. NAP Distinguished Fellows work collaboratively as an inter-professional community to influence and promote national health policy, legislation, quality healthcare, and research. 
- **Dr. Monica Howard**, assistant dean of student success, has been named the recipient of the American Association of Veterinary Medical Colleges 2024 Iverson Bell Award. The award is given to individuals who have played a significant role in the recruitment, development, and retention of pre-vet and DVM students, faculty, residents and interns from underrepresented or disadvantaged and/or marginalized groups. 
- **Dr. Locke Karriker**, Dr. Douglas and Ann Gustafson Professor for Teaching Excellence in Veterinary Medicine and Morrill Professor of veterinary diagnostic and production animal medicine, has been named a founding member to oversee the Academy Certified Expert Educator credential, a joint partnership between the American Association of Veterinary Medical Colleges and the Academy of Veterinary Educators. Karriker has also been elected president-elect of the American Association of Swine Veterinarians. 
- **Dr. Rodger Main** ('96), director of the Veterinary Diagnostic Laboratory, has been named the 2024 recipient of the American Association of Swine Veterinarians' Outstanding Swine Academic of the Year Award given to an AASV member who has demonstrated excellence in teaching, research, and service to the swine veterinary profession. 

- **Dr. Brenda Mulherin**, clinical professor of veterinary clinical sciences, collaborated with VCS colleagues **Drs. Joan Howard**, clinical associate professor; **Beatrice Sponseller**, clinical professor; **Kara Frerichs**, clinical assistant professor; and **June Olds**, clinical assistant professor, to author *Veterinary Oral Diagnostic Imaging*. 
- Two members of the Department of Veterinary Diagnostic and Production Animal Medicine won Track Speaker of the Year Awards at the January VMX/ NAVC Conference. **Dr. Theresa Beachler**, assistant professor, was named the Equine Speaker of the Year, while **Dr. Michelle Buckley**, postdoc research associate, was named the Farm Animal Speaker of the Year. 
- **Dr. Jessica Ward**, the Phyllis M. Clark Endowed Professor in Veterinary Clinical Sciences and assistant dean for extramural student programs, is a recipient of the 2024 Center for Excellence in Learning and Teaching (CELT) SoTL Award. Recipients have demonstrated ongoing engagement and professional development regarding teaching and learning that reflects sustained dedication to the SoTL field (service, mentorship and advocacy). 
- **Dr. David Wong**, professor and chair of the Department of Veterinary Clinical Sciences, recently authored, edited and published the textbook *Equine Neonatal Medicine* with other national and international colleagues. 
- **Dr. Qijing Zhang**, a Clarence Hartley Covault Distinguished Professor in Veterinary Medicine and the Dr. Roger and Marilyn Mahr Chair in One Health, has been named the recipient of the American Association of Veterinary Medical Colleges 2024 Excellence in Research Award. The award recognizes outstanding research and scholarly research and scholarship achievements in the field of veterinary medicine. 

RESEARCH ROUNDUP



When nine locally transmitted cases of malaria appeared in the U.S. in 2023, **Dr. Josh Beck**, assistant professor of biomedical sciences, had more than just a little interest in the disease. A microbiologist by training, Beck has initiated work at Iowa State with the mosquito vector, allowing his group to explore protein export by the malaria parasite during its initial infection of the vertebrate host live.



“We want to understand how the parasite takes over its host cell so we can develop new therapeutics and vaccines that target these processes,” said Beck, whose research is supported by the National Institutes of Health. “That’s what motivates what we are doing here.”

Dr. Jodi McGill, the John G. Salsbury Endowed Chair in Veterinary Medicine and interim associate dean for research and graduate studies, has been awarded a \$50,000 Presidential Interdisciplinary Research Seed Grant.



McGill and Dr. Stephanie Hansen, professor of feedlot nutrition, will study the use of feedlot cattle as a model for human metabolic dysfunction and obesity.

Built on similar physiological responses to high-calorie diets and low exercise shared by both humans and feedlot cattle, McGill and Hansen plan to investigate the relationship between body fat, inflammation, and metabolic changes as cattle progress from the growing to finishing stages of beef production.

Dr. Ravindra Singh, professor of biomedical sciences, has spent years studying a gene that when missing or mutated

causes spinal muscular atrophy (SMA), a deadly disease that’s among the most common genetic disorders in children. His team’s latest work will make the search for treatments even more effective in the years to come. Singh led an eight-year effort to create a truncated version of the Survival Motor Neuron 2 (SMN2) gene to facilitate quicker, cheaper and less fragmented research.



Researchers have for decades isolated segments of genes to study them, creating what is often called a minigene. But the condensed version of SMN2 developed by Singh and his colleagues represents the entire gene. Despite being five to 10 times shorter than natural SMN2 genes, which include roughly 28,000 base pairs, the model Singh’s group built allows scientists to see how changes play out across the gene expression process – from transcription to translation to protein production.

“Now we can make mutations anywhere and quickly see what happens everywhere in the sequence,” Singh said.

Dr. Michael Wannemuehler, professor of veterinary microbiology and preventive medicine, leads a team that has been selected to receive funding from the Margaret B. Barry Cancer Research Program to explore the cellular composition and organization of pancreatic cancer tumors in relation to treatment resistance.



Wannemuehler’s team will use the funding to pursue creation of technology that would allow for manipulation of the cellular structures associated with pancreatic cancer within a model

system to study resistance to both the human immune system and targeted cancer therapies.

Iowa State’s 2024 Bailey Research Career Development Award has been granted to a team of Cyclone scholars with plans to address increasing rates of antimicrobial resistance by transforming predatory viruses into an antibiotic substitute.

The Bailey award is given each year to faculty whose work is high-risk, high-reward and addresses emerging scientific, technical, or societal problems. **Dr. Qijing Zhang**, Distinguished Professor of veterinary microbiology and preventive medicine, and Dr. Meng Lu, associate professor of electrical and computer engineering, received \$150,000 in institutional funding over a period of three years. Their project, “*Synthesis and Directed Evolution of Bacteriophage for Sensing, Therapy, and Beyond*,” will investigate a novel treatment approach in lieu of traditional antibiotic use by designing and utilizing synthetic viruses capable of infecting and destroying various types of bacteria.



“The Bailey award empowers us to take bolder risks and pursue innovative, blue-sky ideas, allowing us to generate preliminary results that can support our quest for future external funding,” Zhang said. “Our aspiration for this project is to establish a technology that not only addresses challenges in therapy, biomanufacturing, and DNA data storage, but also encourages engineers and scientists to adopt a similar approach to come up with practical solutions. By demonstrating the potential of these techniques, we aim to inspire broader adoption and foster innovation in various fields.”

A Need to Mentor

“I really don't feel like I've done anything special. I just did what I thought was right.”

Dr. Monica Howard may think what she does for students in the College of Veterinary Medicine isn't “anything special,” but current and past students and colleagues beg to differ.

When news hit the CVM social media outlets that Howard had been named the recipient of the American Association of Veterinary Medical Colleges (AAVMC) 2024 Iverson Bell Award, the response was immediate.

Hundreds of individuals sang Howard's praise.

She's an amazing educator. The profession is lucky to have her.

The absolute best. Well-deserved honor.

Dr. Howard is such a bright light in veterinary education.

No one deserves this award more!

The Iverson Bell Award is awarded to individuals who have played a significant role in the recruitment, development, and retention of pre-vet and DVM students, faculty, residents and interns from under-represented or disadvantaged and/or marginalized groups.

In her role as the assistant dean of veterinary student success, Howard has served as an unyielding champion for all students and is a constant advocate and resource for students underrepresented in veterinary medicine, while working closely with students on issues of mental and physical wellbeing.

“I'm committed to our students' personal growth,” Howard said. “I want them to be able to see an

evolution in themselves. This job is the most rewarding I could ever do because every day brings an opportunity.”

An opportunity to reach out to students like Sam Schepers, a third-year veterinary student.

“Vet school is really hard, and she understands that,” Schepers said. “I think when our schoolwork gets to be too much, it gets hard to prioritize our mental health. She reminds us to take care of ourselves.”

A veterinarian by profession, Howard has diverse roles in the college and serves in several capacities. She is the college's Director of Multicultural Student Success, a member of the University Committee on Disabilities and the Deputy Title IX Coordinator for the Office of Equal Opportunity.

Howard coordinates more than 35 student organizations, including serving as co-advisor for CVM Spectrum. She serves on countless college committees and is a liaison for several Iowa State University campus service offices including Student Accessibility Services.

It's in this role where Howard has seen a community of students in the college grow and flourish.

“As a member of an underrepresented group who has a visible difference, it makes my heart soar to see students who have disabilities, both invisible and visible, be their 100 percent authentic selves,” she said.

Here is where Howard has made a significant impact in the college.

“She is a familiar face in a place that's not familiar,” said second year veterinary student Neena Lynton. “She is the first black veterinarian that I have had the privilege to meet within this profession,



Photo: Christopher Gannon

but I am extremely happy to be here because she's also here and I know it wouldn't be the same without her here.”

There's no doubt students, faculty, staff, and alumni know the impact Howard has had. Even if she is humble about it.

“Receiving this award has been a humbling experience and when I see past recipients, and even the co-recipient this year, I don't feel I deserve to share the same space,” she said. “I struggle with receiving an award for doing the most basic of human interactions, letting people know you see them, they have value and though we all have differences, those differences are an opportunity to connect and learn from each other.”

Regardless, for Monica Howard it's all about the students.

“Every day brings something new and exciting; an opportunity to grow and to foster growth,” she said. “Our students have so much potential to be successful, not only in the medical aspect of our profession but also in the relationships that they develop with others.

“The same critical eye they are honing to make a diagnosis, I want them to develop that scrutiny and reflection in regard to themselves and the impact they can have on others.” **gd**

On the Case

It has all the makings of a limited television series on Netflix. Just how did two Iowa State University alumni solve a whodunit worthy of a James Patterson novel?

Veterinarians, diagnosticians and producers were baffled early this year when dairy cattle in multiple Texas herds were suddenly producing less milk. And what milk was produced was abnormal and thick. The cows had also seemingly lost their appetites.

Enter Iowa State DVM graduate #1 – Dr. Barb Petersen ('09), the owner and operator of Sunrise Veterinary Service, an ambulatory veterinary practice serving dairy and beef cattle, heifers, and calves in the Texas Panhandle.

“A veterinarian friend asked me if I had noticed adult cows with pneumonia and/or diarrhea, which I wasn't seeing,” Petersen said. “Then I had a client with cows presenting very thick, yellow milk and they were experiencing lower milk production.”

As the calendar turned to spring, other dairy clients of Petersen were noticing the same thing, a milk that had a colostrum-like appearance to it. At first Petersen thought the cause might be the herds' feed, but tests produced no definitive results.

But like a good private investigator, Petersen continued to search for an answer. Clients were reporting sick and dying birds and then ill and dead cats at the dairies.

“The cats really threw me for a loop,” Petersen said. “They were blind, stumbling, circling, not grooming themselves and had a discharge coming from their eyes and nose.”

Enter Iowa State DVM graduate #2 – Dr. Drew Magstadt ('11), clinical associate professor and diagnostic pathologist at Iowa State's Veterinary Diagnostic Laboratory. Magstadt was aware of what was happening in Texas but was stumped by what was causing the issues.

Petersen and Magstadt were on a series of USDA conference calls designed to connect veterinarians, diagnosticians, state animal health officials, academic and university officials, and the animal agriculture industry.

“After one of these Zoom calls, Barb and I got together for a one-on-one discussion,” Magstadt said. “It was her



observation about the cats at the dairies that led us to test for high path avian influenza.”

Since bird flu was already known to be detected in Texas and that cats were susceptible to Avian Influenza, Magstadt wondered if that could be the cause.

Petersen sent milk and tissue samples to Iowa State, and it didn't take long for Magstadt and the VDL team to confirm the theory. The cows' milk tested positive for Influenza A.

“People come to the VDL with questions that we try to answer,” Magstadt said. “In these situations, it's a little bit like detective work. You find that one piece of information to solve the problem. In this case, it was the cats. Before Barb observed that, we had no reason to test the milk.”

Once the discovery was made, the story went viral. Magstadt was interviewed by countless media outlets including the *New York Times*, *CNN*, and *Bloomberg News*, while Petersen was interviewed by the Associated Press, *Science Magazine*, Iowa PBS, and *Bovine Veterinarian*. Magstadt and Petersen have been asked to present at various conferences and have been co-authors on academic papers.

Since this discovery, College of Veterinary Medicine faculty, staff and students have gone into research mode. More than 20 individuals are currently involved in projects trying to answer questions about HPAI with several collaborating projects with research scientists at the USDA in Ames. And there are others across the Iowa State campus in other colleges as well.

The studies range from trying to understand the epidemiology of the disease, to how the disease is transmitted, to disease pathogenesis, to developing vaccine candidates. **gd**

Helping Fort Dodge

The back room of the Almost Home Humane Society in Fort Dodge was packed.

And this was even before the patients had arrived. Forty members of the College of Veterinary Medicine Shelter Medicine Club gave up their Saturday to travel an hour from Ames to Fort Dodge to provide a community veterinary clinic for that community's residents.

"We have had conversations with Iowa State for a number of years to provide such a clinic," said Paul Shane, executive director of Almost Home Humane Society. "I'm very thankful for the students' efforts today and grateful we are building a wonderful relationship with the College of Veterinary Medicine for future events."

On this day, the veterinary students performed physical examinations on more than 60 dogs. They also updated vaccines, did nail clippings, microchipped dogs, conducted heartworm tests, and performed countless other veterinary functions.

In addition to the veterinary students, the clinic was staffed by Dr. Joyce Carnevale, clinical associate professor of veterinary clinical sciences. Carnevale consulted on cases and gave rabies shots.

"The students conducted a complete primary care exam," Carnevale said. "This is a great learning experience for our students, an opportunity for them to practice their skills. If these students go into private practice, half of their day will be spent in primary care like what they are doing today. This is just one way that Iowa State can help prepare them for that type of career."

That's one of the reasons why third-year veterinary student Michelle Langlois spent her Saturday in Fort Dodge.



Photos: Dave Gieseke



"These type of opportunities help us practice what we are learning in the classroom," Langlois said. "But just as importantly, it is an opportunity for me and so many others here today, to give back to the community."

Langlois' fellow Shelter Medicine Club members agreed.

"Giving vaccines, helping with blood draws – these are all things I have to practice," said second-year student Christina Maloney. "It's one thing to learn it in class but doing it on a real patient is invaluable."

"The staff and board of Almost Home have talked about the possibility of this day for a number of years," Shane said. "It's great that it happened." **gd**





A Bigger and Better VDL

Story: Dave Gieseke



Iowa Governor Kim Reynolds was a featured speaker at the dedication and groundbreaking ceremony for the Veterinary Diagnostic Laboratory. The State of Iowa appropriated \$63.5 million for Phase 1 and an additional \$18 million for Phase 2. Photo: Christopher Gannon

There's no project, no goal that's not within the reach of the faculty and staff of the Veterinary Diagnostic Laboratory.

After all, it is the largest diagnostic laboratory in the country. Over 1.6 million tests are conducted annually. That's more than 125,000 cases.

It serves the most progressive livestock and poultry producers in the world with 95% of the testing performed for the animal agriculture industry.

It is not only the largest diagnostic laboratory in the United States, but is considered to be one of the finest as well.

"Hands down, the Iowa State University Veterinary Diagnostic Laboratory is recognized globally as a leader in veterinary diagnostic medicine, especially in the support of animal agriculture," said Dr. Dan Grooms, the Dr. Stephen G. Juelsgaard Dean of Veterinary Medicine.

And as of March 2024, there's a brand-new tool in the already-impressive toolbox that is the VDL.

Phase 1 of a \$143.5 million project was completed three years after construction began. Faculty and staff have moved into the new 101,000-square-foot facility and are fully operational.



Past and current directors of the Veterinary Diagnostic Laboratory, pictured from the left, Dr. Rodger Main, Dr. Lorraine Hoffman, Dr. Vaughn Seaton and Dr. Pat Halbur, and Dr. Dan Grooms, the Dr. Stephen G. Juelsgaard Dean of Veterinary Medicine. Photo: Christopher Gannon



Photos: Simone Stecker

Client services, receiving and accessioning, sample processing, necropsy, pathology, histopathology, bacteriology and a new incinerator moved across the parking lot from their old home in Patterson Hall.

“The new facility will further strengthen the VDL as a national leader in advancing animal health, food safety and public health,” said Iowa State University President Wendy Wintersteen. “The VDL’s world-class expertise and innovative solutions provide essential support for our livestock and poultry producers and benefit all Iowa.”

A GLOBAL IMPACT

Over its 47-year history, the work the VDL does every day impacts animal health, public health, agriculture economics and food security in Iowa and beyond. A few examples include:

- When porcine epidemic diarrhea reached the U.S. in 2013, it was scientists and clinicians in the VDL who were the first to identify the outbreak and pinpoint where it originated. Iowa State developed control strategies including rapid diagnostic capabilities.
- Each time highly pathogenic avian influenza has hit Iowa and the U.S., producers have looked to the VDL to help diagnose affected flocks and contain the crisis. The work performed at Iowa State allowed operations to demonstrate they were free of disease so they could continue to market their products.



Photo: Christopher Gannon



Photo: Paul Gates

- Just this spring, highly pathogenic avian influenza has had another deadly impact on America’s animal agriculture industry. It was diagnosticians at the VDL who identified the disease, allowing producers to better understand this emerging disease threat (see page 8).

“In addition to serving Iowa’s animal agriculture and helping protect the global food supply through world-class diagnostic services, the VDL is also a hub of innovation,” Grooms said. “What separates Iowa State’s VDL from most others is our advancement around animal diagnostic medicine, whether it is developing a new diagnostic test or discovering a novel pathogen.”

One such diagnostic tool is one that will be felt world-wide. Recently a team led by Dr. Philip Gauger and Dr. Rahul Nelli developed a diagnostic test for swine to detect Japanese encephalitis virus, a mosquito-borne disease common in southeast Asia.

And it’s not just animal health where the VDL has had an impact. During the early days of the COVID-19 pandemic, the VDL stepped up and pivoted to provide needed diagnostic capacity and capabilities to help the State of Iowa respond to this crisis.



“At its core, the Veterinary Diagnostic Laboratory plays a substantive behind the scenes role in safeguarding and bettering the health and well-being and the competitiveness of Iowa and U.S. animal agriculture, ensuring a safe, abundant and affordable food supply for our great state and nation,” said Dr. Rodger Main, VDL director.

“The extraordinary faculty and staff of the VDL do the work necessary to deliver high quality, accurate and timely diagnostic services to the people of Iowa, across the United States, and now globally,” Grooms said. “Without them, none of this would be possible.”

AN ADDITIONAL BENEFIT

While the VDL plays a substantial role in protecting and advancing animal health, it also serves as a living laboratory for training the next generation of veterinarians and scientists.

In Phase 1, graduate students have dedicated office space. Fourth-year DVM students have the opportunity to participate in clinical rotations on the necropsy floor and in the bacteriology unit where a teaching lab has been constructed nearby.

“This new facility will serve as a living training facility as the College of Veterinary Medicine continues its 145-year legacy of training veterinarians and scientists to serve

society globally,” Grooms said. “The facility will enable us to develop veterinarians and scientists, discover answers to important questions, and deliver cutting-edge services to the people of Iowa and beyond.”

A STRONG COMMITMENT

Construction of Phase 1 was made possible through a \$63.5 million appropriation from the State of Iowa with the remaining funding for the \$75 million project coming from private donors and Iowa State University.

The Iowa Legislature provided \$18 million for Phase 2 construction. This is in addition to \$40 million from funds directed to Iowa in the Federal American Rescue Plan Act of 2021. Fundraising and Iowa State funding will make up the rest of the \$66.5 million project.

“We are deeply grateful for the state’s support for both phase 1 and phase 2,” Grooms said. “This project would not have been possible without the unyielding support of our stakeholders, particularly the commodity groups and the Iowa Veterinary Medical Association.



Photo: Simone Stecker

“Their support through their voices and financial commitment was essential of the new VDL becoming a reality.”

NEXT STOP: PHASE 2

Even before the last box was unpacked at the new Veterinary Diagnostic Laboratory, work was already underway for phase 2 of the massive project.

In reality, planning for the second phase of the VDL was simultaneous with the original plans for the first building, which was constructed so that an already preconceived addition can be readily built on.

That’s now happening on the site adjacent to the current facility.

Construction began in the spring of 2024, just a month after the first building was operational. Construction is slated to be completed in the fall of 2026.

Until then 80 percent of the lab’s testing functions will continue in their current space in Patterson Hall until the 78,500 square-foot new facility is finished. This includes molecular diagnostics, genetic sequencing, virology, serology, and analytical chemistry and toxicology. A BSL-3 (high biosecurity diagnostics) laboratory and the VDI’s diagnostic and research development are also planned for the second phase.

In addition, the VDI’s administrative staff and support functions including information technology and quality assurance will move into the building in 2026.

“I can only imagine what our extraordinary scientists and diagnosticians will do in this new facility when it is completed,” Grooms said. **gd**



Photo: Simone Stecker



Photo: Dave Gieseke



Phase 2 Construction began on April 4, 2024. Photo: Christopher Gannon



Rural Veterinary Medicine

Stories: Dave Gieseke

Rural communities throughout the United States have a problem – the lack of veterinarians willing to live and work in small communities. The College of Veterinary Medicine is working to help solve the problem with a series of new programs.

Rural Setting

Third-year veterinary student Callie Henrich has a strong desire to return to her roots.

“I want to own my own clinic in the future,” Henrich said, “and I believe that will be easier for me to accomplish in a rural setting.”

Henrich is a native of Akron, Iowa, population 1,500. When an opportunity opened for her to participate in a new College of Veterinary Medicine internship program, she jumped at the chance.

Henrich was one of two veterinary students who spent the summer in the Rural Veterinary Internship Program (RVIP) in 2023. Henrich was hosted by Dr. Shawn Nicholson ('98) at the Stuart Veterinary Clinic. Her classmate, McKayla DeNio, was hosted by Dr. Aubrey Cordray ('14) at the Humboldt Veterinary Clinic.

The program is designed to give students a feel for what life after graduation would be like in a rural veterinary clinic. It is modeled after other VIP programs the College of Veterinary Medicine offers in bovine, swine and poultry medicine.

The RVIP experience was Henrich's second summer veterinary internship program. Previously she worked at a veterinary clinic in DeWitt, Iowa, as part of the Bovine Veterinary Internship Program.

Between the spring and fall semesters, Henrich was immersed into the operations at the Stuart Veterinary Clinic, a true mixed-animal practice. She did a lot of cattle work by going on countless farm calls.

But Henrich's summer was more than large animal medicine.

“I wanted more experience with small animals,” she said, “and the RVIP experience in Stuart gave me a great opportunity to see how a small

animal practice can be operated in a rural setting. It was interesting to see a true mixed animal practice.

“One day I would be helping process cattle and then the next I would be scrubbing into surgery or assisting with dental patients. I was able to do things I hadn't previously done before.”

Besides hands-on experiences, Henrich also learned rural veterinary clinics can be just as progressive and innovative as their big city colleagues.

“I'm sure some rural practices have limited resources and equipment, but that wasn't the case in Stuart,” she said. “It made me realize you can practice high-end veterinary medicine no matter where you are.” **gd**



Callie Henrich
Submitted Photo



The inaugural participants in the Production Animal – Veterinary Early Acceptance Program include Ashley Carroll, Catherine Collison, Bailey DuChene, Ashlyn Hammel and Grace Pollitt. Photo: Dave Gieseke



Early Start

Some plan to work with dairy cattle. Others would prefer swine medicine, while the rest are focused on beef cattle.

Yet each of the six inaugural participants in the Production Animal – Veterinary Early Acceptance Program (PA-VEAP) have one thing in common. Each has a strong desire not only to become veterinarians but plan to practice in rural America.

Which makes each a good fit in the new, joint program between the College of Veterinary Medicine and Iowa State's Department of Animal Science. PA-VEAP has been established to recruit and retain future veterinarians to practice production animal medicine, primarily in underserved areas throughout the United States.

"Growing up in a small rural town, I have always experienced a strong community," said Ashley Carroll, a sophomore animal science major from Elizabeth, Ill. "As a livestock veterinarian, I would be able to feel like I was making a difference in people's lives."

"Not only would I get to share my love for animals and passion for agriculture, but I would be able to help producers and play an important role in their livelihoods."

A recent American Veterinary Medical Association study found less than four percent of veterinarians nationwide predominantly practice production animal medicine.

"The declining number of veterinarians supporting the production animal industry poses a significant food security threat," said Dr. Justin Brown, assistant teaching professor of veterinary diagnostic and production animal medicine and the director of the program. "This shortage also presents an opportunity for students interested in production animal medicine to become a resource for underserved areas."

PA-VEAP is an undergraduate program for students majoring in animal science or dairy science at Iowa State. Students must also complete an undergraduate certificate in beef cattle, dairy cattle, poultry, or swine production management.

"I decided to be a part of this program because it offers the opportunity to expand my experiences and current knowledge in different aspects of the animal agricultural industry," said Ashlyn Hammel, a junior from Dorchester, Iowa.

"Because the program requires the completion of one of the species management certificates, I will have an amazing opportunity to expand my knowledge about management of businesses and see how producers run their operations. This will give me a different perspective when working with producers as a future veterinarian."

"My ultimate career goals are to become a mixed animal veterinarian who specializes in beef cattle, as well as to continue operations on my family's cow-calf operation," said Grace Pollitt,

a junior from Rushville, Ill. "Both of these goals are important to me as they keep the livelihood of my family and hometown community alive and well for future generations."

Carroll, Hammel and Pollitt are part of the initial six-person PA-VEAP cohort. The other Iowa State animal science majors in the program include Catherine Collison, Lake City, Iowa; Olivia Stodghill, Oskaloosa, Iowa; and Bailey DuChene, Waterloo, Ill.

Students must complete all prerequisite courses for admission into the College of Veterinary Medicine and a minimum of 300 hours of approved food animal experiences.

Each student will be assigned a faculty mentor in the College of Veterinary Medicine. That was a strong selling point for Stodghill.

"Our mentor will be a great resource we can use whenever we have questions," she said. "I have already observed that a big part of a veterinarian's job is not only treating animals but communicating to farmers about their care and helping them improve their flock or herd productivity. My job will be to educate the public on disease, treatments and food safety."

"There are many producers who have supported me throughout my education and I would like to be able to return to those areas and support them the way they supported me," Hammel said. **gd**

Photo: Dave Gieseke



Dr. Sami Kemp ('22)

Filling a Need

The reasons vary. Some grew up in rural Iowa. Others appreciated the small town feel. Many wanted to work in an underserved area.

All saw a need.

"I grew up working on dairy farms, so my passion has always been in large animal medicine," said Dr. Sami Kemp ('22). "When I was on preceptorships during my fourth year, I did a fair amount of work in northeast Iowa and really liked the area.

"When I went to Edgewood for six weeks, I saw the need, and really wanted to become a part of the community."

Today Kemp is an owner of Edgewood Veterinary Clinic where she practices mixed animal medicine. Kemp is among a growing trend of College of

Veterinary Medicine graduates who have set up shop in rural Iowa.

And a major factor in their decision is the Rural Iowa Veterinary Loan Repayment Program (RIVLRP) and the federal Veterinary Medicine Loan Repayment Program (VMLRP). The programs are designed to help ease the educational debt load for veterinarians as well as provide veterinary services to shortage areas.

RIVLRP provides loan repayment incentives to individuals who practice in specified locations for up to four years. A veterinarian can receive up to \$60,000 and the total funding for the program, which was started in 2021, has increased from \$300,000 to \$700,000 annually.

Like Kemp, Dr. Kyle O'Neill ('23) is practicing in rural Iowa. He works in Williamsburg and is exclusively a large animal veterinarian.

"I am from Iowa and knew I wanted to stay in the state doing large animal medicine," he said. "RIVLRP was a great way to tackle some of the student loan burden that comes with attending veterinary school.

"It's allowed me to practice large animal medicine exclusively without having to worry about how much I owe."

Dr. Lyle Wielenga, a 2022 graduate, is practicing at Valley Veterinary Clinic in Rock Valley where he works primarily in food animal medicine focusing on bovine and swine. He also left Iowa State with a significant debt loan and RIVLRP has provided a way to make a dent in those bills.

"I was paying my student loans down as fast as possible when I was accepted into the program," he said. "RIVLRP will enable me to be free of student loans in the next four years,



Above: Dr. Kyle O'Neill ('23) and below, Dr. Lyle Wielenga ('22)
Photos: Dave Gieseke

allowing me to plan ahead for future financial needs.”

RIVLRP is open to veterinarians working in either a veterinary shortage area or in a rural service commitment area, which includes Iowa communities with a population of less than 26,000 and located more than 20 miles from a city with a population of at least 50,000.

Dr. Victoria Hegstrom ('23), is another Iowa Stater taking advantage of RIVLRP. Hegstrom practices mixed animal medicine at Ackley Vet Center.

“Before I came to Ackley there was only one veterinarian in the area so there was an obvious need,” Hegstrom said. “But even in the surrounding communities, the veterinarians were doing mostly small animal medicine and not focusing on the large animal clients.

“This program has allowed me to reduce my debt so I can focus on providing better service for my mixed animal clients.” **gd**



True & Valiant

2023 CVM Homecoming Awards

Stories: Dave Gieseke

2024 Recipients

This November, CVM will recognize its 2024 recipients. Each will be highlighted in the next issue of the *Gentle Doctor*.

Stange Award

- Dr. Larry Carpenter ('82), U.S. Air Force Colonel (retired) & Director, Department of Defense Military Working Dog Veterinary Service
- Dr. Shawn Johnson ('96), Marine Mammal Veterinarian & Co-Founder, Sea Change Health

William P. Switzer Award

- Dr. Cherri Trusheim ('99), Small Animal Practitioner & Founder & CEO, Urban Animal

Lorraine J. Hoffman

Graduate Alumni Award

- Dr. David Suarez (PhD veterinary microbiology '95), Research Leader, Exotic and Emerging Avian Viral Disease Research Unit, U.S. National Poultry Research Center

Outstanding Young Alumni Award

- Dr. Marisa Rotolo ('14), Director, Swine Health, National Pork Board

Every year, the College of Veterinary Medicine honors individuals with alumni and service awards. The following pages highlight the 2023 honorees.



Recipients of 2023 College of Veterinary Medicine alumni awards are shown with Dr. Dan Grooms, the Dr. Stephen G. Juelsgaard Dean of Veterinary Medicine (far left). Pictured from the left are, Dr. Adam Christman ('04), Switzer Award; Dr. Cara Hayden ('14), Outstanding Young Alumni Award; Dr. Karen Shaw Becker ('97), Stange Award; Dr. Bryan Buss ('89), Stange Award; and Dr. Larry Sadler ('13 PhD), Lorraine J. Hoffman Graduate Alumni Award. Photo: Christopher Gannon

Bryan Buss ('89)

Stange Award

Dr. Bryan Buss has traveled the world to help improve the public health of underserved and impoverished communities.

This includes helping contain the largest outbreak on record of the Ebola virus in Liberia by deploying there in 2015. Two years later he led a Center for Disease Control and Prevention (CDC) emergency response team in American Samoa, battling the Zika virus.

During the COVID-19 pandemic, he was deployed to the San Francisco International Airport in January 2020 before the virus was detected in the United States, in support of national efforts to stem the virus introduction into the country. He evaluated ill passengers arriving from Wuhan, China, deemed at high risk for infection. Upon returning to Nebraska, Buss aided quarantine activities for repatriated Americans from Wuhan and the Diamond Princess cruise ship.

In Nebraska, he served in several leadership roles in the state's COVID-19 response. He led the laboratory and community testing workstream to more than triple testing capacity in the state's first months of response. Buss also represented Nebraska at briefings of the nation's Operation Warp Speed regarding state readiness in the vaccine roll-out.

Pretty impressive and even more so when you consider Buss had no real interest in public health during his DVM studies, nor during his time as a mixed animal practitioner in Nebraska.

"When I left Iowa State, I had no plans to work in public health," Buss said. "I said my oath at graduation along with my classmates, but the two statements at the end ('promotion of public health' and 'the advancement of medical knowledge') didn't resonate with me at the time."

But after 12 years of practice and substantial family events, Buss found himself doing some pretty serious soul searching.

"While I valued my practice experience, I found myself being pulled towards public health issues," Buss said, "and I found I enjoyed the change of pace."

During his private practice days, Buss was one of the first Nebraska veterinarians to diagnose West Nile in a horse. He worked with a shelter after individuals were exposed to rabies from a dog.



Submitted Photo

Then in 2003 he provided daily up-to-date information on the Mad Cow scare that hit producers around the holidays.

All of which made Buss question his professional future.

"I was really feeling a strong sense of service to the nation and having a broader impact beyond just my local community," he said.

And what an impact Buss has had since he made the career switch and was commissioned as an officer in the U.S. Public Health Service. He has served as a CDC Epidemiology Field Officer assigned to Nebraska for the past 15 years.

Buss and his team have been instrumental in increasing Nebraska's public health epidemiology and workforce capacity, building model electronic disease surveillance systems, managing statewide public health responses, and enhancing the public health infrastructure.

It's exactly what he was looking for when he made the switch to public health.

"I like the opportunities to have positive impact on human population health and to be involved in disease outbreak responses, whether global, national or local," Buss said. "I feel like I'm contributing to the 'greater good.'" **gd**

Larry Sadler ('13 PhD Biomedical Sciences)
Lorraine J. Hoffman Graduate Alumni Award

Dr. Larry Sadler was in the right place at the right time.

“I recognized that if I wanted to be involved in production animal welfare in the way I wanted to be, I would need advanced degrees,” Sadler said. “I was fortunate as I was finishing my master’s degree in animal physiology at Iowa State, Dr. (Suzanne) Millman was starting up her lab and had a PhD position available.”

That job and the subsequent PhD he earned, positioned Sadler for a career with the United Egg Producers where he has maintained a steadfast commitment to proper and humane animal care.

That commitment was forged early in life and fortified during his PhD work with Millman.

“Certainly, the coursework and practical aspects correctly prepared me for the technical aspects of assessing, reviewing, and being able to identify critical components of animal welfare,” Sadler said. “But my best preparation came from the people I worked with.

“Learning from them how to engage in the field of animal welfare and many other disciplines was incredibly valuable.”

Since earning his PhD, Sadler has worked in a variety of roles including serving as the associate director of animal welfare at Kraft Heinz, where he was the first animal

welfare specialist at the company. There he developed the company’s initial animal welfare standards across beef, pork, dairy, and eggs.

From there he moved to United Egg Producers (UEP), where is currently a senior vice president of animal welfare. The cooperative of U.S. egg farmers work collaborative to address legislative, regulatory and advocacy issues impacting the industry where more than 95 percent of all eggs produced in the United States are produced under the UEP Certified Program.

In his role, Sadler is a technical advisor to egg producers for all aspects of hen welfare, serving as a go-to when issues or questions arise. He also led the development of animal welfare training videos for the egg industry, which are used to train most U.S. laying-hen caregivers.

“It just always seemed so important to me that animals we utilize be treated with care, respect, and understanding,” Sadler said.

Unfortunately Sadler’s job does come with a drawback.

“Due to biosecurity protocols, I can’t keep backyard chickens of my own,” he said. “If I had any birds, I wouldn’t be allowed to visit layer farms, which is a significant part of my job.

“I guess I’ll have to wait to get a backyard flock when I retire.” **gd**



Submitted Photo



Submitted Photo



Karen Shaw Becker ('97) Stange Award

She's the world's most followed veterinarian on social media. At last count, more than 2.3 million animal lovers around the world follow Dr. Karen Shaw Becker on Facebook.

Becker also consults for a variety of health and wellness companies and has created the largest pet wellness website. In her spare time, she enjoys formulating fresh pet food recipes for transparent, ethical pet food companies, while developing pet health products to improve the wellbeing of companion animals.

Oh, and she's also the co-author of *The Forever Dog*, a how-to book that vaulted to the top of the New York Times bestseller list. It is the first dog health book ever to hit number one.

"I was looking for a platform to provide free resources and tips for people to provide better care for companion animals," Becker said. "Pet lovers are desperate for information on how to make better choices and not have regrets. If social media was the place where I could reach more people than I could in a clinic, then I decided that is what I should be doing."

Co-authored with Rodney Habib, founder of Planet Paws, *The Forever Dog* gives practical, science-backed tools to protect companion animals.

The authors traveled the globe before the COVID pandemic, interviewing the owners of the oldest dogs in the world – people whose dogs have lived into their 20s and even their 30s. Then they met with top geneticists, microbiologists and longevity researchers to review these case studies, identifying what the owners did (and didn't) do that can positively influence lifespan, according to the latest research.

Many of the tips in *The Forever Dog* are similar to what physicians tell their human patients – eat right, get plenty of exercise and do the things you love.

"Dogs are really victims of their owners' health and wellness choices," Becker said, "and we spend a lot of money buying things for our dogs. Shouldn't we be doing things that will prolong their lives?"

One of those things Becker argues in *The Forever Dog* is to identify all forms of stress in your dog's life. In her interviews with the experts and the owners whose dogs had exceedingly longer life expectancies, she came up with a common dominator - reduce the dog's stress levels, including mental, emotional, physical, and environmental chemical stress.

"These extra long-lived dogs all have an exceptional quality of life," Becker said. "Every single one of the owners also suggested that it was important to identify things their dogs wanted to do." **gd**



Adam Christman ('04) Switzer Award

Dr. Adam Christman is a rock star in the making.

That was evident at this past year's American Pre-Veterinary Medical Association (APVMA) Symposium at North Carolina State University. Christman was a constant presence at the symposium including delivering the keynote address to hundreds of pre-vet students from colleges across the nation.

From the moment he was introduced, Christman had the audience in the palms of his hands. Countless times throughout his keynote, the audience jumped out of their seats. His passion for animals and their care was evident throughout.

But it is his stage presence and ability to connect with an audience that has propelled Christman into the limelight. He's a national thought leader, speaker and author on practice management, social media, and rehabilitation, and coauthored, *Honey, Have You Squeezed the Dachshund? A Pet Owner's Guide for Owners Who are Terrified of IVDD*, a book on dogs with disabilities.

His followers on TikTok exceed 800,000 and he loves to engage with fellow pet parents and veterinary professionals across social media platforms.

Christman's influence was more than evident at the APVMA conference. His conference session was overflowing and when he hit the exhibit hall he was swarmed by attendees, taking selfies and group shots in front of the Iowa State College of Veterinary Medicine booth for more than an hour.

"I've always said, being a veterinarian is truly a performance – you have to deliver a great performance to your clients and fellow team members consistently," he said. "Social media is a fantastic way for anyone to brand themselves.

"I think Facebook, Instagram, TikTok and YouTube are great places to be for a veterinarian. It's where your clients are. This way, the clients receive the right information from you and not from 'Dr. Google.'"

Christman is also the chief veterinary officer of dvm360 and has been in private practice and shelter medicine for the past 20 years in New Jersey. **gd**

Cara Haden ('14) Outstanding Young Alumni Award

Dr. Cara Dykhuis Haden has found her calling.

Or at least a following.

A couple of years ago, Haden was searching for a new way to attract followers to her Facebook, Instagram and YouTube pages. One of her responsibilities at Pipestone Veterinary Services in Independence, Iowa, where she is an associate veterinarian, is getting the word out on swine production through social media outlets.

"As a true millennial, I focused on Facebook, Instagram and YouTube," she said, "but I only had around 5,000 followers and I wanted a bigger reach."

Her husband, who is a high school teacher, suggested TikTok. Today she has nearly 300,000 followers on TikTok under "Cara Haden Pig Vet," using the platform to educate the general public about swine production. She typically posts two to three times a week and all of her videos are less than a minute. Some are as short as 15 seconds including video clips she has produced on farrowing, biosecurity, a vasectomized boar, and filtered air in swine facilities.

"When I first started doing TikTok videos, I underestimated how little people understood where their food comes from," Haden said. "So I started doing videos on really simple things including what a boar is and what a sow is.

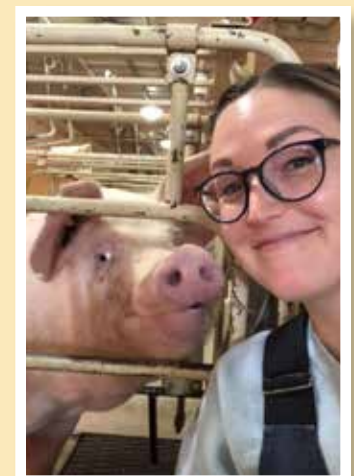
"I've had to educate people that we have different locations for processing pigs. I don't see an end to the number of videos I can do to further educate people."

Haden is the star of her TikTok videos. She films them herself with her phone, usually in a swine facility. She produces the videos herself.

Regardless of the subject, Haden's ultimate goal is to emphasize how the swine industry is benefitting the world.

"The farmers we at Pipestone work for are doing really good work in feeding the world and I hope I'm helping tell their story," Haden said. "I'm not trying to convince people to eat more pork.

"I'm just trying to educate people." **gd**



Submitted Photo

CSI: Wildlife



Everyday Dr. Rebecca Kagan walks through her office door, she does so with the realization that very few people in the world do what she does for a living.

In fact, you can count on one hand the number of wildlife forensics pathologists there are in the world, let alone the United States.

“The lab where I work is the only federal wildlife crime laboratory for the study of wildlife forensics,” Kagan said. “For full-service wildlife forensic pathology of wildlife in the United States, we’re it.”

Kagan’s lab is the U.S. Fish & Wildlife Service National Forensics Laboratory in Ashland, Ore. As a veterinary pathologist since 2010, she has worked with Federal Fish and Wildlife agents and refuge officers on suspected legal violations.

Think CSI for wildlife. This involves collecting evidence, figuring out what analyses to do, putting together test results and ultimately determining a cause of death.

Wolves, California condors, and bald and golden eagles are the most seen species at Kagan’s lab. But she has also seen cases involving Florida panthers, walrus, grizzly and polar bears, and other federally protected species.

Every animal that comes through the lab gets a full external and internal examination. Kagan has also learned crime scene investigation techniques that come in handy.

“Alternate light source examinations, skeletonization and microscopic

examinations of hairs are all things I now do routinely,” she said.

“Radiographs, including CT images, and photography are also essential and part of our protocol for every case.”

As you can imagine, it’s not the easiest job in the world.

“Determining the cause of death can be challenging in wildlife because there is often no history and many times, we are given a body that is very decomposed,” Kagan said. “Sometimes just bones are left but I’m often amazed at what we can still determine from just that.”

Kagan and her team have other tricks up their sleeves. Many of the bodies arrive at the lab completely dried out after sitting in nature but are rehydrated. The lab even has a dermestid beetle colony which provide a gentle and fast way to clean off bones.

“This enables us to look at the bones closely for fracture patterns and more easily retrieve embedded metal,” Kagan said, “but combing through masses of beetles is definitely not something I ever thought I’d be doing as a pathologist.”

These techniques are important if federal charges are filed against a suspected offender, although it’s rare that a case will go to trial. Most are pleaded out or settled.

Kagan has testified twice, once in front of a grand jury and the other at a trial for an individual who was charged with poisoning a Bald Eagle with what Kagan determined was a tightly regulated poison.



Submitted Photo

“The lawyers took it easy on me when I was on the stand,” she recalled. “They didn’t know much about wildlife pathology.”

Kagan’s interest in pathology started at Iowa State. She recalled looking at two microscope slides of intestine; one with transmissible gastroenteritis and one with parvovirus.

“The instructor pointed out how the two different viruses cause two different lesions and I saw it,” she said. “It was like magic.”

After graduating in 2004, she completed a small animal internship, and a zoo pathology residency program. That led to a two-year zoo pathology fellowship at the San Diego Zoo where she developed connections with the U.S. Fish and Wildlife Service Forensics Laboratory.

“I love the microscope’s ability to reveal secrets,” Kagan said. “My job is definitely not boring.” **gd**

#GentleDoctorsEverywhere



**Gary
Borkowski**

#GentleDoctorsEverywhere
'87

New CEO

AAALAC International has appointed Gary Borkowski as its new CEO. In this position, Borkowski will oversee the administration of AAALAC's international operations including offices in North America, Europe and Asia; supervising fiscal and personnel management for the association; providing oversight of AAALAC's Accreditation, Program Status Evaluation, and Education & Outreach programs; promoting the organization's mission; and serving as AAALAC International's spokesperson. "I am excited to be part of the next chapter in AAALAC's journey to improve the welfare of animals used in science and education. AAALAC plays an important role in ensuring high quality animal care around the world and it is an honor to be able to help with this work," Borkowski said. "The dedication and hard work of our staff and volunteers inspires me. I am committed to doing what is best for AAALAC International, as well as for the animals and personnel at our accredited programs."



**Curt
Cavanaugh**

#GentleDoctorsEverywhere
'88

Retiring Vet

Curt Cavanaugh said he always liked animals. Growing up in central Iowa he knew he didn't want to be an engineer like his brother, so he decided to give veterinary studies a try at Iowa State. "I hoped I would like it, and I did," he said. Cavanaugh has worked as a veterinarian in the Kansas City area, including owning the Cavanaugh Pet Hospital first in Independence and then in Blue Springs, Mo., Cavanaugh recently retired after more than 30 years in the profession.



**Susan
Chadima**

#GentleDoctorsEverywhere
'79

Training Afghan Vets

Coco, a 10- to 12-week-old street dog, arrived at Kabul Small Animal Rescue with a smashed paw, deliberately inflicted. "It's about life and death and values and the role of animals in an agrarian culture, which is vastly different than ours," says Susan Chadima. The Maine veterinarian has traveled to Kabul, Afghanistan, to work with animal organizations for almost 20 years. She says however, amid the animal cruelty and neglect she has seen, she has also witnessed unexpected acts of kindness as she continues to work to better the futures of animals in a vastly different culture.



Brady and Ashley Dierks

#GentleDoctorsEverywhere '21

All About the Relationship

They say opposites attract, but it's their similarities that attracted married couple Brady and Ashley Dierks. Both grew up raising cattle in rural northeastern Nebraska. Both attended the University of Nebraska-Lincoln. They both majored in animal science and minored in chemistry. Both applied for veterinary school at the same time and followed the same track to Iowa State, graduating in 2021. And now, both are known as "Dr. Dierks" at Bloomfield Veterinary Clinic. The Dierks joined the veterinary practice in Bloomfield, Neb., this past January.



Gary Marty

#GentleDoctorsEverywhere '87

The Fish Doctor is In

In his long career in the public sector, Gary Marty has had his share of personal attacks. And he understands why. "One thing I realized is that if people cannot attack your science, then they will attack your reputation," Marty said. For 19 years, Marty worked as a diagnostic fish pathologist at the B.C. Ministry of Agriculture's Animal Health Centre, where he was among only a handful of board-certified veterinary pathologists in Canada who specialize in fish.



Alana McNutt Prickett ('11)
John Prickett ('14)

#GentleDoctorsEverywhere

Adopting New Opportunities

Although both Alana McNutt Prickett and John Prickett come from veterinary families, they realize that the business climate their parents faced are a lot different than those at their clinics in Tipton and New Liberty, Iowa. "Mixed animal practice is a tough business model," John says. "The margins are much smaller than a specialty practice, the overhead is much higher because we must have facilities for multiple species and the diversity of equipment and drugs that we must carry can be daunting at times."

#GentleDoctorsEverywhere



Chuck ('78), Dennis ('81),
Terry ('90) Riordan

#GentleDoctorsEverywhere

Family Business

It's a scene that's as Beaverdale (Iowa) as a red brick. Dr. Riordan and son caring for an animal. "Animals were an extension of you," says Chuck Riordan. "They're just a natural part of the family." The late Dr. Bob Riordan ('49) started Riordan Pet Hospital in 1951. Today, three of his sons are continuing the practice. "There was no 24-hour facility back then," Terry Riordan remembers. "There was no emergency clinic, so there were times when we'd wake up in the morning and we'd go into Mom and Dad's bedroom not knowing what you're going to find, and you'd find a dog that he brought home that was sick that he'd cared for right there in his bedroom," Bob Riordan spent decades caring for dogs, cats, and sometimes, Riordan kids. "He sewed up the back of my head after I fell on the concrete," says Dennis Riordan. "And I just laid on his little surgery table and he was like 'this is gonna hurt a little bit.'"



Melissa
Garcia Rodriguez

#GentleDoctorsEverywhere '23

The American Dream

A passionate associate veterinarian now, Melissa Garcia Rodriguez will be the first to tell anyone her love for animals didn't start out that way. "When I was a kid, I'd see a dog in the middle of the street, and I'd start to kind of run away and start to cry," Garcia Rodriguez said. "I'd jump on my mom or the closest person's back. I'd start bawling because I was afraid of dogs." Garcia Rodriguez is over that childhood fear and has been for some time. She works at the Adair County Veterinary Clinic in Greenfield, Iowa.



Emily
Snyder

#GentleDoctorsEverywhere '11

Curiosity and the Vet

*Emily Snyder's curiosity over the years has led her to a place where improving the health of beef cattle is of utmost importance. "My big motivation is my own curiosity. I'm interested in knowing why animals get sick and what's the cause of it," said Snyder, assistant professor in the Department of Large Animal Clinical Sciences at the University of Saskatchewan's Western College of Veterinary Medicine. After she earned a master's degree in food animal medicine in 2016 and a PhD degree in 2020 from the University of Georgia, Snyder moved to Saskatoon and began her position at the veterinary college. Her interest in antimicrobial resistance and respiratory diseases in beef cattle began when she was conducting research at the involving stocker cattle and strains of *Mannheimia haemolytica* that were resistant to antimicrobial treatments.*



Jamie Stoll

#GentleDoctorsEverywhere '12

On the Move

When COVID hit, Jamie Stoll knew she had to make a career change. "Before I decided to become a mobile vet, I was considering leaving veterinary medicine due to the stressors," Stoll said. "Pet numbers have soared since COVID and many vets are leaving clinical practice, so there is an ongoing vet storage." Instead, Stoll founded Green Pasture Pet Vet, a mobile practice in Primghar, Iowa. Her 24-foot-long veterinary clinic van includes a surgery table, anesthetic machine, dental machine, lab area, blood machines, and a single kennel.



Warren VerPloeg

#GentleDoctorsEverywhere '53

Golden Times

The sole survivor of the Class of 1953 is a spry 95-year-old Storm Lake, Iowa, resident. Dr. Warren VerPloeg's life has been marked by hard work, generosity and the desire to keep learning. He lives by himself and keeps his own house. His lineup of flowering geraniums at his south window oxygenate his home, he says. He cooks for himself and enjoys the Dinner Date meals each weekday at the senior center.



Jim West

#GentleDoctorsEverywhere '71

An Unbelievable Opportunity

Reflecting on his life's work and his years in Waverly (Iowa), which were formative in his growth as a veterinarian, businessman, and as a family and community man, Jim West is quick to admit that he is amazed by how it all turned out. In 1980, after working for a few years at the Waverly Veterinary Clinic, with his wife Mary's assistance and support, West started Westwood Embryo Services, working to help dairy farmers improve their herds. "I would never have predicted my career would go the way it has gone," West said.

Job Openings

The College of Veterinary Medicine has established a new program for potential employers to recruit CVM students called the Practice Partners Program. The program is the primary mechanism for practices, corporations and other organizations to interact with CVM students for recruitment purposes.

These job openings are also available to CVM alumni and can be found online. Information for practices that which to be a part of the program is also available online.



Mark Your Calendars for these Upcoming 2024 Alumni Reunions

Class of 2004

Aug. 23-25, 2024

Kansas City dvm360
Fetch Conference
Contact: Drs. Adam Christman
or Rachel Allbaugh



Class of 1974

Sept. 5-7, 2024

Altoona/Ames, Iowa
Contact: Dr. Jim Thompson

Class of 1994

Nov. 1-3, 2024

Ames, Iowa
Contact: Dr. Carissa (Pounds) Williamson

Class of 2009

Nov. 1-3, 2024

Ames, Iowa
Contact: Dr. Barb Petersen

ALUMNI UPDATES

- **Dr. Danelle Bickett-Weddle** ('99) has received the Helwig-Jennings Award from the American College of Veterinary Preventive Medicine for "outstanding and prolonged service to the ACVPM." A veterinary consultant, Bickett-Weddle is known for her expertise in livestock biosecurity.
- **Dr. Bryan Buss** ('89) has been honored with the Undergraduate of Distinction Award from the University of Nebraska-Lincoln Department of Animal Science.
- **Dr. Richard Carpenter** ('74), Sebring, Fla., has been named the recipient of the Florida Veterinary Medical Association's Lifetime Achievement Award. Carpenter owned the Animal Clinic at Kelly Crossing in Fort Meyers and most recently worked part time at the Humane Society of Highland County.
- **Dr. Aaron Colwell** ('20) is the recipient of the 2023 Nebraska Veterinary Medical Association Young Veterinarian of the Year Award. Colwell is a veterinarian at Eastside Animal Center in Gothenburg, Neb.
- Two alumni have been named Fellows of the Conference of Research Workers in Animal Diseases including **Dr. Christopher Chase** ('80), Brookings, S.D., South Dakota State University, and **Dr. Jim Roth** ('75), Ames, Iowa State University.
- **Dr. Elizabeth Devine** ('08), has been named the associate dean for student affairs and admissions at Lincoln Memorial's Richard A. Gillespie College of Veterinary Medicine. Devine has been an assistant professor of large animal surgery at LMU since 2020.
- **Dr. Robert Dysko** ('83), clinical professor of laboratory animal medicine at the University of Michigan, has retired after 34 years at the university. Among his many accomplishments, Dysko served as president of the American Association for Laboratory Animal Science from 2010-11.
- **Dr. Nate Haas** ('09) has been named the president and director of research and development with Bio-Vet, Inc., where he will develop and oversee research and communicate animal trial results.



IN MEMORIAM

Notices of recent deaths are available online at vetmed.iastate.edu/alumni-giving/alumni/memorial. If you know of a recently deceased CVM alumnus, faculty or staff member please send the notice to dgieseke@iastate.edu.



Commencement

The College of Veterinary Medicine held Commencement ceremonies for the Class of 2024 in early May. Dr. Adam Christman ('04) was the featured speaker. Photo: Dave Gieseke



CONGRATS!

- **Dr. Greg** ('67) and **Linda Harrison** of South Beach, Fl., have received the Association of Avian Veterinarians Lifetime Membership Award.
- New officers for the Iowa Veterinary Medical Association (IVMA) were sworn in during the organization's annual meeting in September. The new officers include **Dr. Kristen Clark** ('11), Ames, president; **Dr. Ken May** ('87), Slater, president-elect; **Dr. Aubrey Cordray** ('14), Humboldt, vice president; and **Dr. Shawn Nicholson** ('98), Stuart, immediate past president. **Dr. Zachary Wilcox** ('12), Sioux Center, was elected to the IVMA Executive Board to represent Northwest Iowa and **Dr. Rachel Friedrich** ('09), Ames, was appointed to fill a board vacancy to represent Central Iowa.
- The IVMA also presented its 2023 awards during the annual meeting. Recipients included:
 - > **Dr. Fred Sick** ('74), Sioux Center, Veterinarian of the Year. Sick practiced mixed animal medicine for 23 years before joining Boehringer Ingelheim. He has a passion for encouraging young people to become veterinarians.
 - > **Dr. Abbey Smith** ('19), Belle Plaine, Rising Star Award. Smith is a mixed animal veterinarian at North Tama Veterinary Clinic and has expanded her clinic's client base by adding equine, chiropractic and acupuncture services.
 - > **Dr. Rex Wilhelm** ('68), Stuart, President's Award. Wilhelm served as a mentor for past IVMA president Dr. Shawn Nicholson ('98).
- **Dr. Jeff Kaisand** ('93), state veterinarian for the State of Iowa, has been named a 2023 Honorary Master Pork Producer by the Iowa Pork Producers Association.
- **Dr. Bill Liska** ('73) has been named the 2024 Distinguished Career Achievement Award recipient by the Texas Veterinary Medical Association.
- **Dr. Shana Schank** ('07) has been appointed the executive director of the Santa Ynez Valley Humane Society/DAWG in Buellton, Calif.
- Several CVM graduates were recognized by the South Dakota Veterinary Medical Association (SDVMA) during the annual state meeting.
 - > **Dr. Vicky Wilkey** ('82) of Blunt received the SDVMA Distinguished Service Award. Wilkey operated a successful mobile practice in Pierre prior to her retirement.
 - > **Dr. Jessica Juarez** ('14), Brookings, was the recipient of the SDVMA's Emerging Leader Award. Juarez directed the Professional Program in Veterinary Medicine at South Dakota State University.
- The SDVMA also recognized the Class of 2023 Life members including **Dr. Dean Christianson** ('84), Ashley, N.D., and **Dr. Leann Schulz-Thomas** ('83), Marion.
- Officers were elected for the South Dakota Veterinary Medical Association including **Dr. Heather Lerseth-Fliehs** ('07), president, Groton; **Dr. Broc Mauch** ('22), vice president, Pierre; **Dr. Jacob Geis** ('13), secretary-treasurer, Parkston; and **Dr. Christopher Chase** ('80), AVMA delegate, Brookings.
- **Dr. Hayley Springer** ('10), extension veterinarian at Penn State Extension, received the Pennsylvania Dairy Innovator Award.
- **Dr. Paul Sundberg** ('81), past executive director of the Swine Health Information Center, has received the Distinguished Service Award at the National Pork Industry Forum. He was also recently honored at the 2023 NAPRRS/NC229 International Conference of Swine Viral Diseases.
- **Dr. Dan Taylor** ('10), Fort Collins, Colo., has recently joined CodaPet, an at-home pet euthanasia service. Two other CVM graduates, **Dr. Christina Vernon** ('09), Phoenix, Ariz., and **Dr. Sheryl Hemmer** ('17), Omaha, Neb., joined CodaPet in 2023.
- The Veterinary Medical Alumni Association has honored two Iowa State alumni.
 - > **Dr. Paul Armbricht** ('71), Rockwell City, has been presented the VMAA Outstanding Service Award.
 - > **Dr. Ryan Steen** ('00), Cedar Rapids, has been presented the VMAA Outstanding Mentor Award.
- **Dr. Randy Wheeler** ('77), executive director of the Iowa Veterinary Medical Association, was presented with the Distinguished Service Award by the Veterinary Medical Association Executives (VMAE) and the 2024 VMAE Executive of the Year Award. Wheeler recently completed a term as VMAE president.
- **Dr. Paul Yeske** ('85), senior member of the veterinary team at the Swine Vet Center in St. Peter, Minn., has received the American Association of Swine Veterinarians' 2024 Howard Dunne Memorial Award, which recognizes an AASV member who has made important contributions and provided outstanding service to the association and the swine industry.



Donations Top \$24 Million

The College of Veterinary Medicine raised more than \$24 million in cash and deferred gifts in the recently completed fiscal year.

The total exceeds this past year's goal of \$14 million and was more than \$11 million more than the previous fiscal year.

Students remain the primary beneficiaries through endowments and expendable funds for scholarships and programming. Other priorities, including the new Veterinary Diagnostic Laboratory, received fundraising support last year.

"It's always exciting to see the level of support our alumni, friends and stakeholders have for the College of Veterinary Medicine, the Veterinary Diagnostic Laboratory and the Lloyd Veterinary Medical Center," said Dr. Dan Grooms, the Dr. Stephen G. Juelsgaard Dean of Veterinary Medicine. "These funds will not only help develop the next generation of veterinarians and scientists but allow the college to discover solutions to important animal and human health questions and deliver innovative services to the people of Iowa and beyond."

Compassionate Client Giving Program Expanded

The Compassionate Client Giving Program has long been a staple of the Lloyd Veterinary Medical Center (LVMC) and its small and large animal hospitals.

This initiative is designed to involve clients and friends actively in advancing the LVMC mission.

"Many of our Compassionate Clients who give back to the hospitals are connected to us by our referring veterinarians," said Trent Wellman, senior director of development. "Additionally many of the Compassionate Clients have received care from an Iowa State CVM alum who participate in the giving program."

Several funds have been established which will assist the various programs in the LVMC including the Companion Animal Fund, Equine Medicine Greatest Need, the LVMC Excellence Fund, Oncology Excellence Fund, and the Small Animal Internal Medicine Excellence Fund.

"Without the generous support from our clients and friends, we would not be able to deliver the outstanding services that our patients and their families have come to count on," said Rachael Rail, associate director of development. "We look forward to celebrating the difference you can make by becoming one of our Compassionate Clients."

Additional information on the Compassionate Client Giving Program is available online at vetmed.iastate.edu/vmc/clients/giving-hospital/compassionate-client-giving-program.

Members of the College of Veterinary Medicine fundraising team can be contacted at vetmeddev@iastate.edu or 515-294-0867.

**Compassionate Client
Giving Program**

*Your animals count on us.
Can we count on you?*



Alumni, Friends, Stakeholders Support New VDL

A significant portion of the funding need to build Phase 1 and Phase 2 of the Veterinary Diagnostic Laboratory came from appropriations from the State of Iowa.

Private funding was also vital in order for the building to become a reality.

“We would not be here today without the partnership and generous investments by the State of Iowa, our industry and commodity partners, stakeholders and donors,” Iowa State University President Wendy Wintersteen said at the VDL dedication ceremony in April. “We’re proud to recognize everyone who saw the value in investing in this critically important facility.”

Naming space opportunities are still available for Phase 2. For more information contact:

Trent Wellman

Senior Director of Development
College of Veterinary Medicine
twellman@foundation.iastate.edu
515-294-4675

Major donors to the VDL include:

- Dr. W. Eugene and Linda Lloyd
- Iowa Farm Bureau Federation
- Iowa Pork Producers Association
- Iowa Corn Growers
- Iowa Soybean Association
- Farm Credit Services of America
- Dr. Mark L. and Beverley Anderson
- Dr. James and Marie Fragodt
- Iowa Veterinary Medical Association
- Merck Animal Health
- Center Fresh Group
- Dr. James and Inge Higa
- Dr. Lynn Coover Anderson
- Dr. James R. and Donna Cooper
- Dr. Lorraine J. Hoffman
- Iowa Dairy Farmers
- Iowa Beef Industry Council
- Iowa Cattlemen’s Association
- Iowa Cattlemen’s Foundation
- Iowa Egg Council
- Iowa Poultry Association
- Iowa Turkey Marketing Council
- Dr. Craig and Elizabeth Rowles
- Dr. Patrick G. Halbur and Dr. Therese G. Halbur
- Dr. Wayne and Karen Freese

- Dr. William and Joan Blohm
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- Dr. Keith and Louise Aljets
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- Dr. Dan and Donna Grooms
- Dr. Rodger and Marcy Main
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- Dr. Vaughn Seaton
- Dr. James and Carol Sue Triplett
- Dr. Randall and Julie Crom
- Dr. Marv and Verona Johnson
- Dr. Robert and Jean Telleen
- Dr. Dan and Lorraine Whitney



Photos: Simone Stecker

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Nov. 1-2, 2024

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