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Our Strategic Plan

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The Graduates of 2016

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Executive Veterinary Program Expands
Where the Extraordinary Happens Every Day

So far in the 21st century, 75 multimillion-dollar-grossing superhero films have been released.

I don't have to go to the movies to see tremendous feats of strength, intellect, and valor. These things happen every day at the College of Veterinary Medicine.

This issue of Veterinary Report captures many of these compelling stories. Read about:

- research that offers hope to people with a rare form of deadly brain cancer, page 2
- staff members who devised ingenious strategies to teach anatomy, pages 9 and 10
- students who volunteer to save last-chance pets, page 12
- alumni who memorialized an unforgettable classmate through a scholarship, page 15
- an innovative treatment for corneal ulcers, explored thanks to funding from the Companion Animal Memorial Fund, page 17
- brain surgery, performed by our faculty members and an alumnus, that delivered a young border collie from seizures, page 18
- a post-graduate certificate program that has advanced the careers of more than 300 professionals, page 22

The common denominator behind these stories is our people: the faculty members, students, staff, alumni, and donors who have an extraordinary and life-changing impact on the health and well-being of animals and people around the world.

The Power of People with a Plan

In January, the college introduced its 2016–2020 Strategic Plan. The plan's four goals provide a framework for the impactful stories in this magazine.

Of course, the plan does far more than categorize activities: it magnifies the power of what we do. It focuses our efforts on the issues that we, collectively, have identified as most crucial. It provides a road map for achieving our vision, a touchstone for investments of our time and other resources.

Among the college strengths that our plan proposes for increased investment of resources is wildlife conservation and zoo medicine. Programs spanning research, veterinary and post-graduate education, and service in this area have a combined impact that exceeds the sum of their parts. Read more about the ways our college is saving individual animals, conserving wild populations, advancing knowledge, and developing the next generation of veterinary expertise in this field on pages 24 to 27.

The more we can showcase the daily heroism of our people and programs, the more recognition our college will gain. The more people who become our proponents, the more powerful our impact will be.

I challenge each of you to seek out your own inner superhero and join forces with the college in its mission of discovery, teaching, service, and stewardship.
STRATEGIC PLAN

2016–2020 Strategic Plan

Goal 1. Foster Scholarship, Discovery and Innovation
Expand and support nationally recognized research programs
Research provides the foundation for our education and service activities. It is our most powerful tool for delivering global impact. Strategies for achieving this goal include hiring more faculty with a strong focus on research, combining our two basic science departments to create a more prominent research presence, aligning college research with areas of campus research strength, and supporting faculty members in pursuing research opportunities, from clinical trials to large externally funded grants.

Goal 2. Provide Transformative Learning Experiences
Provide transformative veterinary and biomedical educational experiences in a vibrant and diverse learning community
Strategies related to our educational mission focus on efficiency, innovation, and collaboration. We will invest in personnel, training, technology, and infrastructure to deliver a learner-centered, state-of-the-art curriculum.

At the same time, we will create distinctive Illinois programs that make credentials from our college coveted in the marketplace, and we will expand our online offerings and seek new partners in education both on the Illinois campus and around the world.

Goal 3. Make a Significant and Visible Societal Impact
Provide excellent comprehensive veterinary medical and diagnostic services, public engagement and outreach, and continuing education programming at the state, national, and international levels
The college has a very broad portfolio in its service mission. Chief among our priorities is the delivery of outstanding clinical and diagnostic services. We also aim to be seen as the premier source for veterinary information for practitioners, animal producers, and the general public. Offering outreach events that unite alumni, volunteers, students, and other stakeholders will provide value to these groups and reinforce their bond with the college.

Goal 4. Steward Current Resources and Generate Additional Resources for Strategic Investment
Promote a supportive, respectful, and productive working and learning environment
We will serve as good stewards of the college’s assets and resources, particularly personnel, our most valuable resource. Collaborations with corporate entities represent a possible avenue for advancing clinical trials and other research, as well as graduate student funding. We will also implement a plan to actively recruit a more diverse work force and student body. Ultimately, we will actively enhance the reputation of the college.

Read the full strategic plan online: vetmed.illinois.edu/strategic-plan/

Our Vision

We will be a pre-eminent public college of veterinary medicine, provide a transformative educational experience for our students, create and communicate knowledge that changes the world, deliver outstanding clinical service to our patients and clients, and pursue excellence in all our endeavors.
Anticancer Research Advances
with $7 Million Investment

Since 2007, Dr. Timothy Fan, associate professor of oncology, has collaborated with chemistry professor Paul Hergenrother to test the safety and efficacy in dogs of PAC-1, an anticancer molecule developed by Hergenrother. PAC-1 or similar analogues have now been used to treat dozens of pet dogs with naturally occurring lymphomas and osteosarcomas.

In 2015 PAC-1 moved to phase I clinical trials in human cancer patients at the University of Illinois Cancer Center in Chicago and Johns Hopkins University School of Medicine. (Phase I trials are meant to determine the maximum tolerable dose of a cancer agent and are not tests of a drug’s efficacy.)

Only about a dozen patients with a variety of late-stage cancers had been enrolled by May 2016, when researchers announced a boost in funding.

An additional $7 million angel investment from an anonymous contributor, the same person who had invested $4 million to help get the compound into the drug-approval pipeline, will make it possible to further expand human clinical trials.

The U.S. Food and Drug Administration also recently granted PAC-1 orphan drug status for the treatment of glioblastoma multiforme, a deadly brain cancer. This designation is given to expedite development of drugs to treat rare diseases or conditions affecting a small subset of the population.

An estimated 12,120 new cases of glioblastoma are expected in the U.S. in 2016. The median survival with standard-of-care therapy is 14.6 months.

Some of the preclinical studies—in cells, mice, rats, and dogs—suggested that PAC-1 could aid in the treatment of glioblastoma, a disease for which there are few therapeutic options.

“There have been no unexpected toxicities and the dose escalation is progressing well,” Hergenrother said of the human trials.

“It takes a lot of time, a lot of effort, and a lot of money to do human clinical trials. So to have the means to expand access to PAC-1 from a dozen patients to, we hope, hundreds, is very exciting.”

—BASED ON REPORTING BY DIANA YATES

Fighting Cancer Is His Theme

Dr. Timothy Fan is among the founding members of a new cancer-related research theme at the Carl R. Woese Institute for Genomic Biology at the University of Illinois.

The “Anticancer Discovery from Pets to People” theme draws upon comparative oncology and genomics in the search for new anticancer targets and anticancer drugs. Making the latest promising cancer therapies available to veterinary cancer patients not only offers the potential to extend the lives of these animals but also identifies and advances efficacious new drugs for treating human cancers.

“Comparative oncology is a growing discipline that melds the expertise of clinicians and basic scientists to discover better ways to study cancer and develop new therapies,” said Dr. Fan. “Our thriving veterinary oncology program provides the clinical foundation for the interdisciplinary anticancer research within this theme.”

Tumor’s Shape May Influence Metastasis

Only a few cells in a cancerous tumor are able to break away and spread to other parts of the body, but the curve along the edge of the tumor may play a large role in activating these tumor-seeding cells, according research published in the journal *Nature Materials*.

Dr. Timothy Fan and Kristopher Kilian, a professor of materials science and engineering, led the study. Using engineered tissue environments in various shapes and patterns, the study of skin cancer found that the more curved the cell cultures were, the more cancer cells at the edges displayed markers of stem cell characteristics—the key to spreading to other tissues.

The findings could lead to a better understanding of cancer as well as to applications for personalized treatment plans.
Grant Advances Clinician-Scientist Career

Robin Holland, a student in the college’s Veterinary Medical Scholars Program, recently received a highly competitive and prestigious fellowship from the National Institutes of Health (NIH) to support her training for a career in research.

The NIH Ruth L. Kirschstein National Research Service Award (NRSA) is awarded to individuals pursuing dual-doctoral degrees, both a PhD and an MD, DVM, or other medical doctoral degree. This award was created to increase the pool of highly trained clinician-scientists in the biomedical research workforce.

Not only are a small percentage of applicants granted the NRSA, but even fewer are awarded on the first submission, and Holland’s was.

“Receiving the NRSA is beneficial on a number of levels,” said Holland. “Of course, the funding itself is incredibly valuable, especially as it will apply during my remaining years in the veterinary program and provide me the financial support to participate in specialized off-campus rotations specifically related to my field of study. But the prestige associated with an individual NIH grant, and especially the NRSA, is an achievement that I will remember throughout my academic career.”

Holland conducts research in the laboratory of Steven Blanke, professor in the Department of Microbiology. She seeks to elucidate the mechanism by which a toxin produced by Helicobacter pylori, a bacterium that colonizes the human stomach and plays a role in the development of gastric ulcer disease and gastric cancer, manages to invade the cell’s powerhouse, the mitochondria.

The toxin Holland studies, called VacA, does not reach the mitochondria via any of the intracellular pathways researchers have noted in use by other bacterial toxins or even in the intracellular trafficking of endogenous host cell proteins. Holland’s work tests the hypothesis that the H. pylori toxin is transported from the cell surface to the mitochondria by rerouting physiological vesicular trafficking machinery.

If this work demonstrates a previously unknown mechanism by which toxins move from the surface of host cells to the mitochondria, the findings not only address a major gap in knowledge in the study of mitochondrial targeted pathogenic effectors, but may also lead to new therapies for blocking toxin activities that contribute to disease.

“The Veterinary Medical Scholars Program has given me every opportunity to become successful,” she said. “I could not have hoped for a better place for my scientific training.”

Equine Research Proposals Funded

Illinois equine researchers fared well in an international animal health grant competition, garnering two of the 16 equine grants approved by the Morris Animal Foundation for the 2016 funding cycle.

Dr. Santiago Gutierrez-Nibeyro received funding to evaluate the effectiveness of a new surgical suture technique to repair upper airway obstruction in horses with a common upper respiratory disease called recurrent laryngeal neuropathy. Dr. Gutierrez is boarded in equine surgery and is a diplomate of the American College of Veterinary Sports Medicine and Rehabilitation.

Dr. Annette McCoy’s study will look at risk factors for osteochondrosis, a disease that affects the progress of bone growth by killing bone tissue and that has a high prevalence in Standardbred horses. This examination will include biomechanical forces in different horse gaits as well as genetic risk factors in pacers and trotters. Dr. McCoy is a diplomate of the American College of Veterinary Surgeons and completed a PhD in comparative and molecular biosciences at the University of Minnesota.

Both faculty members see patients at the Veterinary Teaching Hospital in addition to conducting research.
Pioneer in Study of Wildlife Reproduction Headlines Research Day

On April 20 the College of Veterinary Medicine held its annual Research Day celebration, featuring invited speaker Dr. Cheryl Asa.

Asa is the director of clinical research at the St. Louis Zoo as well as the director of the Association of Zoos and Aquariums Reproductive Management Center at the St. Louis Zoo, an organization she founded in 1999 as the Wildlife Contraception Center.

Her talk on the need for translational science in maintaining sustainable animal populations resonated with college research strengths in reproductive biology at the molecular and cellular levels, clinical reproductive strategies in domestic species, translational medicine in cancer and other fields, and investigations at the intersections of wildlife, environmental, and human health.

Two graduate students were recognized with literary awards from the Illinois chapter of Phi Zeta, the honor society of veterinary medicine:

- **Clinical Research Award:** Dr. Jamie Stewart, bovine theriogenology resident, MS 2018, for “Effects of Different Applications of Pyrethrins and Cyfluthrin, a Synthetic Pyrethroid, on Bull Reproductive Parameters”

- **Basic Science Research Award:** Dr. Zachary Neumann, oncology resident, MS 2015, for “The Association of Endothelin-1 Signaling with Bone Alkaline Phosphatase Expression and Protumorigenic Activities in Canine Osteosarcoma”

Six students and trainees from the college were selected to give presentations:

- **Sushmitha Durgam,** Second Harmonic Generation Imaging Provides Quantitative Analysis of Collagen Alignment in Healing Equine Flexor Tendons

- **Qingzhan Zhang,** Dual Functions of the Nonstructural Protein 1 of Porcine Epidemic Diarrhea Virus for Degradation of CREB-binding Protein and Suppression of NF-kB Activity for Innate Immune Modulation

- **Sharada Mahalingam,** Equol Inhibits Growth, Induces Atresia, and Inhibits Steroidogenesis of Mouse Antral Follicles In Vitro

- **Robin Holland,** Fighting for the Heart of the Cell: Pathogen vs. Host Cell Control of Mitochondria

- **Kate Echeverria,** Pharmacokinetics and Pulmonary Disposition of Minocycline in the Adult Horse

- **Alycen Lundberg,** Investigating the Use and Tolerability of the Novel Drug Isobutyryl-Deoxynuobquinone (IB-DNQ) in Feline Oral Squamous Cell Carcinoma

New Faculty Appointments

Two faculty members received academic promotions in the past year. In the Veterinary Diagnostic Laboratory, **Rick Fredrickson, DVM, MS,** was promoted to clinical full professor; in the Department of Veterinary Clinical Medicine, **Maureen McMichael, DVM, DACVECC,** was promoted to full professor.

**Matt Allender, DVM, MS, PhD, DACZM,** comparative biosciences, and **Elizabeth Driskell, DVM, PhD, DACVP,** pathobiology, both moved from clinical-track appointments in their respective departments to tenure-track assistant professor positions.

Two who had held visiting positions, **Patrick Roady, DVM, MS, DACVP,** clinical assistant professor in the Veterinary Diagnostic Laboratory, and **Gary Brummet, DVM,** instructor in veterinary clinical medicine, were recently appointed as full-time faculty members.

Social Media for Vet Med at Illinois

**College of Veterinary Medicine**
- facebook.com/VetMedIllinois
- twitter.com/ILLINOISVetMed
- instagram.com/VetMedIllinois

**Veterinary Teaching Hospital**
- facebook.com/Illinois.VTH
- twitter.com/illinoisvethosp

**Alumni Association**

**Wildlife Medical Clinic**
- facebook.com/UIWMC
- twitter.com/WildlifeatIL
New Faces

Sara Connolly
Clinical Assistant Professor, Veterinary Clinical Medicine
DVM, Purdue University
MS, Clinical Pathology, Purdue University
Small Animal Internship, Veterinary Specialists of South Florida
Clinical Pathology Residency, Purdue University
Diplomate, American College of Veterinary Pathology (Clinical Pathology)
Research Interests: Bone marrow cytology and histopathology, effect of endurance exercise on hematology and biochemistry

Stephanie Keating
Clinical Assistant Professor, Veterinary Clinical Medicine
DVM, University of Guelph; Guelph, ON, Canada
Doctor of Veterinary Science in anesthesiology, University of Guelph
Diplomate, American College of Veterinary Anesthesia and Analgesia
Research Interests: Pain assessment, adjunctive therapies for pain management, loco-regional anesthesia, cardiopulmonary effects of anesthetic drug combinations, immunological effects of anesthetic and analgesic agents

James Lowe
Associate Professor, Veterinary Clinical Medicine
DVM, University of Illinois
MS, Epidemiology and Immunology, University of Illinois
Diplomate, American Board of Veterinary Practitioners
Research Interests: Management of viral respiratory disease in swine production systems, improving commercial livestock production processes

Prabhakara Reddi
Associate Professor, Comparative Biosciences
PhD, National Institute of Immunology, New Delhi, India
MSc, Andhra University, Visakhapatnam, India
Postdoctoral research, University of Virginia
Research Interests: Transcriptional regulation of mammalian spermatogenesis

Amy Somrak
Visiting Clinical Instructor, Veterinary Clinical Medicine
DVM, University of Illinois
MBA, Case Western Reserve University
Small Animal Internship, University of Illinois
Dentistry Residency, University of Illinois
Clinical Interests: Routine and advanced dental procedures, including extractions, advanced techniques to maintain teeth such as bone grafting and root canals, jaw fracture repair, management of severe feline and canine stomatitis, correction of malocclusions, and evaluation and treatment of unusual oral lesions

William Witola
Assistant Professor, Pathobiology
PhD, Hokkaido University, Sapporo, Japan
Certificate in Advanced Protozoology, Obihiro University, Obihiro, Japan
Postdoctoral Fellow (Molecular Parasitology), Hokkaido University, Japan
Postdoctoral Fellow (Molecular Parasitology), University of Connecticut Medical Center
Postdoctoral Fellow (Molecular Parasitology), University of Chicago Medical Center
Research Interests: Protozoan and nematode parasites of medical and veterinary significance, including Toxoplasma gondii, Cryptosporidium parvum, Plasmodium, and Haemonchus

Kathryn Wycislo
Visiting Clinical Assistant Professor, Veterinary Diagnostic Laboratory
DVM, University of Illinois
PhD, University of Illinois
Clinical Pathology Residency, University of Illinois
Diplomate, American College of Veterinary Pathologists
Research Interests: Canine osteosarcoma

Retirements, Departures Bring Leadership Changes

With deep gratitude, the college thanks Drs. Karen Campbell, Duncan Ferguson, Mark Kuhlenschmidt, and Allan Paul, who have all retired in the past year. (See stories pages 28 to 31.)

“The college is very fortunate to have experienced and trusted faculty leaders who were ready to step into interim roles in January so that departmental operations could continue running smoothly,” says Dean Peter Constable.

Those serving as interim department heads are:

- Dr. David Bunick, Comparative Biosciences
- Dr. Philip Solter, Pathobiology
- Dr. Dennis French, Veterinary Clinical Medicine

A search is in progress for a new head for the Department of Veterinary Clinical Medicine.

After much deliberation, faculty have voted to form a single unified basic sciences department by uniting the Departments of Comparative Biosciences and Pathobiology. As this process moves forward, the college will seek an internationally renowned researcher to head this new department.

We also wish all the best to long-time faculty and staff who have recently moved to positions at other institutions. Dr. Ralph Hamor is now at the veterinary college at the University of Florida. Drs. Mark Mitchell and Lorrie Hale-Mitchell have returned to Louisiana State University, where Mark is leading the Veterinary Teaching Hospital and Lorrie is a clinician focused on acupuncture. Brenda Berst, former associate dean for advancement, accepted a position at Washington University School of Medicine in St. Louis earlier this year.

We are grateful for the contributions these outstanding individuals have made to our college. In part because of the foundations they helped to create, the college is well positioned to achieve its goals.
Class of 2016 Enters Diverse Career Paths

After four years engaged in one of the world’s most innovative veterinary curricula, the 116 members of the Illinois Class of 2016 graduated on Friday, May 13. Here is a sampling of the positions they are entering.

Having an Illinois DVM will have a huge impact on my life. Illinois has shaped me and prepared me to enter into the working veterinary world with a sense of pride and accomplishment. I feel ready to start off my career, and I owe my experiences at Illinois for that.

—Dr. Kayley Rodriguez, associate veterinarian, Belleville (Ill.) Animal Clinic

Sweet Home, Chicago

The College of Veterinary Medicine has historically reserved a majority of its seats for Illinois residents, and many of those students wind up in the Chicago area after graduation. Dr. Margaret Drewno is heading to a small animal private practice in her hometown of Naperville. Also returning to the suburbs are Dr. Brittany Childs and Dr. Angela Mitas, both from Downers Grove. Dr. Wendy Karnia, of La Grange, plans to pursue a small animal internship in Chicagoland. Dr. Shannon Darcy, a native of West Bloomfield, Mich., also plans to practice in the Chicago area.

Dr. Michael Dow, from Willowbrook, plans to enter a small and mixed animal practice on the outskirts of suburbia, and Dr. Christine Mallo, from Mokena, will venture further north to become one of four doctors at Hales Corner Veterinary Clinic near Milwaukee, Wis.

North, South, East, and West

Members of the Class of 2016 leaving the Midwest to pursue small animal careers include:

- Dr. Brianna Beaudet, from Boca Raton, Fla., who is starting an internship at Canobie Lake Veterinary Hospital in Windham, N.H.
- Dr. Eliza Ekins Yanik, recently of Boston, Mass., who is moving to Santa Cruz, Calif., and hopes to specialize in feline internal medicine.
- Dr. Ellen Glenn, from Evanston, Ill., who will enter a shelter medicine internship at the San Diego Humane Society.
- Dr. Melody Mullin, a lieutenant in the Army Veterinary Corps, who will be stationed in Corpus Christi, Texas, where she will care for military working dogs and border patrol dogs and horses and perform public health services.
- Dr. Mark Ryan, also in the Army Veterinary Corps, who will move to Georgia after graduation; he and his wife plan eventually to open a small animal practice in Southern California.
Mixing It Up

Not all members of the Class of 2016 have their sights set on small animal practice. Another segment plans to work in a mixed animal practice, seeing companion and farm animals alike.

**Dr. Heather Wright** will return to her hometown of Piper City, Ill., to work at Whitman Veterinary Clinic, a mixed animal rural practice.

**Dr. Ben Blair** will work in mixed animal practice in his hometown of Sparta, Ill. **Dr. Chelsea Ballinger**, of Stewardson, Ill.; **Dr. Tess Fiedler**, from Janesville, Wis.; **Dr. Paige Gunderson**, from Leland, Ill.; **Dr. Mara Nix**, from rural Richland County, Ill.; and **Dr. Jessica Nourie**, of Danville, Ill., are all entering a mixed animal practice.

**Dr. Brigitte Mason** gained advanced experience as a student working for several leading pork industry businesses to help launch her career as a swine veterinarian. **Dr. Daniele Milazzo** grew up in suburban Addison, Ill., but intends to complete an internship and residency in large animal medicine.

Still others, such as **Dr. Erica Morton**, of Roscoe, Ill., and **Dr. Steven Zary**, from Elk Grove Village, Ill., plan to focus their practice on a mix of exotic pets and small animals.

**Horse Sense**

**Dr. Meaghan MacQueen**, from Elmhurst, Ill., has owned and shown American Saddlebred horses since she was 10 years old; she will begin an internship at Kendall Road Equine Hospital in Elgin, Ill., starting in July. **Dr. Catherine Foreman**, of St. Joseph, Ill., will follow the family passion for horses, beginning with a year-long internship with Southern Equine Service in Aiken, S.C. **Dr. Liz Odyniec**, from Lindenhurst, Ill., will be completing an equine internship at B.W. Furlong and Associates, a large sports medicine practice in New Jersey; she has worked with veterinarians for the Canadian, German, Irish, and U.S. Olympic Equestrian teams. **Dr. Beth Byles** will enter an equine internship at Mid-Atlantic Equine Medical Center, located in Ringoes, N.J.

Other students with plans for an equine internship include **Dr. Margaret Bojko**, of Oak Lawn, Ill., who has a strong interest in equine reproduction, and **Dr. Marcus Wisniewski**, from Belleville, Wis., who has a special interest in harness racing.

Veterinary Specialization

**Dr. Mara Suzann Varvil**, from Carbondale, Ill., is entering a residency and PhD program in clinical pathology at Purdue University. Eventually, she would like to be an educator, researcher, and clinical pathologist. **Dr. Leslie Frailey**, from Crystal Lake, Ill., also plans to pursue a veterinary pathology residency after a few years in practice.

**Dr. Natalie Rupp**, from Elmhurst, Ill., will begin a small animal rotating internship, with a future goal of working in academia as a boarded surgeon. **Dr. Julie Stoka-Hanley** would like an academic career after gaining board certification in diagnostic imaging. **Dr. James Karnia**, from Oak Forest, Ill., also plans to specialize in diagnostic imaging and radiology.

**Dr. Mark Byrum**, from Decatur, Ill., has been immersed in conducting research in the college’s comparative oncology laboratory throughout his four years at Illinois. He has his sights set on becoming a boarded medical oncologist.

**Dr. Robert Rush**, from Carlinville, Ill., plans to specialize in zoo/wildlife/conservation medicine. **Dr. Tessa Fischer**, originally from California, is one of many Illinois students who entered the college’s five-year joint DVM/master’s in public health degree program. She’ll complete her master’s in public health degree at the University of Illinois at Chicago in the coming year, and plans a career working with zoonotic diseases and preventive medicine.
Wildlife Program Has Impact

For many new graduates, one of the most influential and memorable parts of the Illinois experience was not part of the curriculum at all but a volunteer role. Nearly a third of our students volunteer in the college’s Wildlife Medical Clinic, which provides care for more than 1,500 ill or injured wild animals every year.

Dr. Amelia Gould, from Rapids City, Ill., says one of her most powerful learning experiences came from handling critical cases and teaching others about wildlife rehabilitation while she was one of two student managers of the Wildlife Medical Clinic. After completing a small animal rotating internship, she hopes to enter a residency program in zoo medicine.

Dr. Jenny Kuhn, from New Lennox, Ill., who plans to work in an exotic and small animal practice in the Chicago suburbs, credits her hours volunteering in the Wildlife Medical Clinic as among the most memorable of her studies. “My best moments were working with the resident birds of prey and talking with classrooms about wildlife,” she says.

Dr. Kyra Berg, intern, Milwaukee Emergency Center for Animals

The most memorable part of my time at Illinois was definitely the Wildlife Medical Clinic, which helped me grow so much when it comes to confidence, technical skills, communication and team building, conflict resolution, and teaching fellow colleagues.

—Dr. Kyra Berg, intern, Milwaukee Emergency Center for Animals

Sheep Deliver Hands-on Education

The oohs and coos one expects to hear in a delivery ward were mixed with plenty of high-pitched bleats and long, passionate “mehs” on a sunny March evening when half a dozen first- and second-year veterinary students visited.

That’s because these moms were ewes, and sometimes when a student entered a pen to scoop up a baby for its health check, vaccinations, and ear tag, mom made her objections known.

“Don’t worry. We’ll bring him right back to you,” promised one student.

Hands-on Learning

Along with considerable cuddling, each lamb received two injections and an ID tag. The males also got a painkiller and a castration band.

The students, all members of the Production Medicine Club (PMC) or Theriogenology Club at the College of Veterinary Medicine, took turns holding, vaccinating, banding, medicating, and tagging. With 13 lambs, everyone got plenty of hands-on time.

Dr. Chelsey Ramirez, an instructor at the college, and Dr. Jamie Stewart, who is completing a residency in bovine reproduction, were there to teach and supervise.

The ewes and lambs were also there to teach.

“When it comes to teaching animal reproduction to students whose goal is to become a mixed animal practitioner, the ewes present a more practical model than do other species in terms of safety, economics, and hands-on opportunities,” said Dr. Ramirez. “We are in the process of expanding our current flock to be able to accommodate the teaching needs.”

continued on page 10
Class of 2019 By the Numbers

Before the start of the fall semester, many of the incoming Class of 2019 participated in the Illinois Veterinary Leadership Experience, with leadership from current veterinary students and sponsorship of the Illinois Veterinary Medical Alumni Association. The daylong program, held at Lake of the Woods near Mahomet, Ill., involved lots of activity, discussion, and fun.

Here are quick stats on the Illinois Class of 2019.

110 women, 19 men

69 Illinois residents; 25 other states are represented, as are two other nations, Canada and Japan

97 arrived with a BS degree; 14 with a BA; 2 have master’s degrees; and 1 arrived with a law degree

34 earned their undergraduate degree from the University of Illinois at Urbana-Champaign; 6 from Augustana College in Rock Island, Ill.; 5 from Michigan State University; 3 each from Cornell University, Elmhurst (Ill.) College, Purdue, University of Georgia, and Western Illinois University; and others studied at nearly 60 other institutions, including Harvard University, North Carolina State University, University of California-Davis, University of Florida, University of Minnesota, and University of Wisconsin

Horse Skull of a Different Color

The handiwork of Ashley Lynch, an instructional laboratory specialist who assists in the anatomy course, attracted attention in veterinary media earlier this year. Lynch has painted more than a dozen skulls to help students distinguish among the many bones of the skull using colors.

She devised a system in which each bone has a unique color used consistently across species, including dog, cat, horse, and cow. She also paints colored rings around each kind of opening on the skull for nerves and blood vessels.

Students have responded very positively to these new instructional aids.

“We know that students don’t all learn things the same way,” says Lynch. “I hope this is a small step toward empowering all kinds of learners.”
Design Team Builds Virtual 3-D Model to Teach Cow Anatomy

BY JODI HECKEL

Point your phone or tablet at the poster with a cow image and a small 3-D cow appears before you—Desktop Bessie, with her skeleton, circulatory, digestive and nervous systems, and various organs visible as you move around her.

If you’re a veterinary student, the augmented reality cow is a great way to learn a cow’s anatomy.

If you’re not a vet student, it’s just cool.

Desktop Bessie made her debut at the college’s Open House on October 4. Bessie and the app that makes her possible were created by a team of designers: shown at right, they are Janet Sinn-Hanlon, Alan Craig, and Kerry Helms.

Kerry Helms, the creative director and senior designer for the Design Group at Vet Med, said the college uses a wide variety of models, mannequins, and simulations to augment learning and ensure students are as prepared as possible to work with live animals.

“We see this as an additional tool for teaching and learning anatomy,” he said.

“It is difficult to understand spatial relationships among organs and tissues when looking at 2-D images in a textbook or on a slide,” said Dr. Dawn Morin, assistant dean of academic affairs and curriculum. “When a veterinarian performs abdominal surgery on a cow, he or she must explore the abdomen by feel and be able to decide if organs are situated correctly relative to each other and are of appropriate size and texture. To do this requires an excellent knowledge of 3-D anatomy. This app will, among other things, help students develop a good mental picture of bovine abdominal anatomy.”

Medical illustrator Janet Sinn-Hanlon modified commercially available models of a cow’s organs to make them anatomically correct. The 3-D model shows the skeleton, heart, lungs, four-chamber stomach, spiral colon, liver, gall bladder, kidneys, uterus and ovaries, as well as the major blood vessels.

Alan Craig, an augmented reality developer working with the veterinary college on this project, created the apps. Craig used computer vision software, and when the device with the app “sees” something it recognizes—the cow poster created by Helms—it displays the virtual 3-D model of the cow that Sinn-Hanlon built.

“The critical element with this is it engages your body. Instead of just swiping or using a mouse, you’re looking around it.”

Sheep, continued

Unique Educational Opportunity

The hands-on teaching did not start with the delivery. In October 2015, fourth-year veterinary students on a population medicine rotation kicked this learning cycle off with an artificial insemination lab.

“The first group of ewes to lamb were all bred via laparoscopy by fourth-year students,” said Dr. Stewart. “Any ewes that didn’t become pregnant from that lab were put out with the ram and bred by him on their next cycle, about 18 days later.”

Allison Bergin, who graduated in May, appreciated the opportunity to try her hand at laparoscopic surgery in the lab.

“Every new experience is a selling point when you are a new graduate, so being able to say I’ve successfully artificially inseminated a sheep and done a laparoscopic procedure is definitely a unique attribute,” she said.

“It was exciting to do because a lot of routine surgeries, such as canine spays, are becoming laparoscopic. I was familiar with the process, but only in theory from reading about it and watching videos of others performing the procedure,” she said.

“There seems to be a steep learning curve. The easiest way to describe it to say it’s like playing a video game!”

Something to Brag About

Veterinary students were also engaged in ultrasound labs with the pregnant ewes.

“The first lab was around a month after artificial insemination, where we identified the ewes that were pregnant from the AI lab. Third-year students in a theriogenology lab pregnancy-checked the sheep via abdominal ultrasound,” said Dr. Stewart.

“We also held separate labs for the Therio and PMC clubs a few weeks later, where we confirmed the AI ones were still pregnant and then found that the ram had successfully bred the rest.”

Bergin did not participate in the ultrasound labs because she was completing off-campus rotations from December through March. In fact, she did not learn that the ewe she had inseminated had become pregnant until she saw the baby when she went with Dr. Stewart to check on the sheep while on a rotation in Rural Animal Health Management.

“I was so excited to see ‘my’ ewe with her babies!” reported Bergin. “I even asked Dr. Stewart to take a picture of me with the lamb and posted it to Facebook to brag about it all.”

“Something to Brag About” continued

Allison Bergin, Class of 2016, was excited to discover that she had successfully inseminated her ewe in October.
The system also must recognize where the camera in the device is in relationship to the cow image to display it appropriately as the user moves around and looks at the organs from different angles. Getting the image aligned with the position of the user in the real world was the tricky part, Craig said.

“The critical element with this is it engages your body. Instead of just swiping or using a mouse, you’re looking around it,” he said.

Craig also built into the app a way to look at the different anatomical systems separately. Touch the head of the cow on the poster and you can turn the view of the skeleton on or off, for example. Craig built other “buttons” into the poster cow’s hindquarters, udder, front legs and back legs that can turn on or off the images of other systems.

Craig and Sinn-Hanlon also can control the transparency of the image the user sees. For example, they can make the ribs more transparent to better see the heart and lungs. The skin was made totally transparent for the demonstration at the open house.

Eventually, Craig said, he’d like to animate the cow app.

“It doesn’t just have to stand still. We can give it behaviors and have it move around,” he said.

A second app works with a fiberglass cow sculpture—Dr. Moo-little—that was originally decorated as artwork for the Cows on Parade exhibit in Chicago in 1999. The app shows the organs, skeleton and blood vessels in the appropriate size and position as the user points a device at the sculpture.

The push toward using interactive 3-D tools in teaching at the veterinary college was initiated by a retired faculty member, Dr. Gerald Pijanowski. He and Sinn-Hanlon teamed up in 2010 to develop a 3-D model of a dog’s leg based on CT scan and MRI data. The 3-D model could be rotated and magnified, and anatomy students could turn the individual structures on and off.

The current apps grew out of some other projects involving the design team. Helms designed a T-shirt with the image of a heart, Sinn-Hanlon illustrated the heart and created a beating animation, and Craig developed a way to use a device to see the heart beating in orange and blue, with the university’s insignia, a block “I,” on the wearer’s chest.

The team would like to develop 3-D images of other animals. Sherrie Lanzo, who teaches in the Clinical Skills Learning Center at the college, said the app will help students visualize how organs and the blood supply and other internal structures relate to one another underneath the cow’s skin and skeleton.

For example, if students could see the lungs expanding as Desktop Bessie “breathes,” they’ll be able to see how much the lungs inflate and how they move across the abdominal structures.

“I think having this will be a big aha moment,” Lanzo said.
Students and Donors Connect at Scholarship Celebration

Smiles, hugs, and tears were part of the program on April 23 when scholarship recipients and donors shared a meal and connected over shared passions for animals and the veterinary profession.

Dr. Andrea Van Schoick, Class of 2000, gave an emotional tribute to her classmate Dr. Casey Cadile, who died in 2013. (Read about the Dr. Casey Cadile Memorial Scholarship on page 14.) Dr. Marcus Brown, Class of 1986, and Dr. Bill Augustine, Class of 1975 and president of the alumni association board, also shared their perspectives on awards they helped to create.

In all, 247 awards representing nearly $610,000 in scholarship support were recognized at the event. Nine awards and scholarships were awarded for the first time in 2016:

- Dr. Casey Cadile Memorial Scholarship
- Class of 1969 Scholarship
- Dr. Edward Khuen Excellence in Dentistry Scholarship
- Dr. C. Max Lang Scholarship for Veterinary Medicine
- Genevieve B. McDonough Scholarship
- Rose Ann Meccoli Memorial Award
- Dr. Paul and Sara J. Meginnis Scholarship
- Dr. Lisa Rehberger Scholarship in Veterinary Medicine
- Dr. Larry St. Clair Excellence in Anatomy Scholarship

Speaking on behalf of award recipients, Brit’nee Haskins, Class of 2018, gave a stirring call for diversity in the veterinary profession. Excerpts from her remarks follow.

Visit our website for a video of all the speakers at this event.

... Growing up, I never saw or met any veterinarians or animal care workers, but when I finally did as a teenager, I saw no one who looked like me. It took very supportive family and community members to help this determined student enter a field where I felt as though I may not be adequately supported, understood, or valued.

With my veterinary degree, I have committed to connecting with young people in communities similar to my home communities. Just as crucial as it is for kids to participate in the arts and programs like STEM (science, technology, engineering, math), kids require mentors who can guide them in these same areas, especially in veterinary medicine.

Touching the lives of others requires no extra cost. Giving time is a different kind of currency; it is an investment. A little bit of time goes a long way. Plant a seed, cultivate it, nurture it in its early stages, and observe its blossoms.

With rising interest in veterinary medicine and rising costs for attending veterinary colleges, making veterinary medicine accessible to those that are dedicated and willing to put in the work to enter this prestigious field should become the priority. And I feel as though, we have a long way to go with that path.

... People of different colors, complexions, languages, gender, interests, and socioeconomic backgrounds are a requirement for progress. We cannot ignore this fact. We have to avoid making this education we hold so dear out of reach, so that we do not miss out on the great minds of the future.
Connected by Cancer: Mark Byrum, Class of 2016, is the first recipient of the Dr. Casey Cadile Memorial Scholarship. Drs. A’ndrea Van Schoick and Christina Tran were classmates of Dr. Cadile who were instrumental in establishing the scholarship. Like Dr. Cadile, Byrum’s father died of cancer. Byrum conducted research in the oncology laboratory of Dr. Tim Fan as a student, and he plans to pursue a career in academia so he can teach and contribute to research as well as practice veterinary medicine.

Illini Pride: Alyssa Mohus, Class of 2016, received the Illinois Veterinary Medical Alumni Association Award, given for overall proficiency in veterinary clinical medicine. Dr. Mohus joined a private practice owned by three Illinois veterinarians after she graduated in May. At left in the photo is Dr. Bill Augustine, alumni association president.

All Smiles: Janina Paula Luciano, Class of 2016, gets a hug from Dr. Katie Kling of the Veterinary Teaching Hospital’s dentistry service. Luciano was selected for the Dr. Albert S. Dorn Award for Excellence in Small Animal Dentistry and Oral Surgery. Luciano also received the inaugural Genevieve B. McDonough Scholarship. Luciano joined the Metropolitan Veterinary Center in Chicago, Ill., after graduation.

Honor Thy Father: Julie Nelson, Class of 2017, received the Dr. Marcus L. Brown, Jr. Memorial Scholarship. With her is Dr. Marcus Brown, Class of 1986, who established the scholarship in memory of his father, who earned a veterinary degree from the college in 1958.

Class Endowment: Dr. Robert Twardock, a long-time faculty member at the college, represents his classmates in bestowing the Class of 1956 Scholarship on Kayla Wade, Class of 2018. Wade, from South Carolina, plans to pursue a PhD as well as a DVM to conduct research that will improve management practices for production animals.
Scholarship Honors Alumna’s ‘Incredible Heart, Unlimited Courage’

BY IRENE CARNEY

“To all who met her, it was immediately apparent that Casey was someone special.”

With these words, Shannon Cadile tried to communicate something of the impact her sister, Dr. Casey Cadile, Class of 2001, had on her world.

“In addition to being the smartest person I ever met, she had an incredible heart, adventurous spirit, and unlimited courage,” Shannon wrote in 2013, the day after Casey’s death at age 40, after a battle with breast cancer. “She could light up a room with her smile, bring down the house with her hilarious stories, and instantly connect with all animals (people included) with her warmth.”

Dr. Cadile’s classmates and family have contributed funds to establish a scholarship in her memory so that her spirit and courage can continue to impact the profession and university she loved so much.

“I can’t remember a time when working with animals wasn’t what Casey wanted to do,” recalls Shannon, saying her sister grew up with pets that ranged from hamsters to horses. Starting at the age of 12 and throughout her undergraduate studies, Casey volunteered at the San Francisco Zoo, eventually working with the birds of prey in the zoo’s Animal Rehabilitation Center.

Casey earned dual bachelor’s degrees in cell biology and chemistry from Cornell University, where she lettered in track and field as a hammer thrower.

Her first cancer diagnosis came while she was at Illinois, but, to the extent her health would allow, Casey maintained her focus on completing her veterinary degree. Shannon says Casey and her family were very grateful to the College of Veterinary Medicine for providing a supportive community and “always leaving the door open” to accommodate Casey’s health needs.

Dr. Cadile went on to complete an internship in emergency medicine at Cornell University and a residency in veterinary oncology at Michigan State University and to join a specialty practice in her native California. Her cat, Calamity Jane, and her dog, Summer—both rescues adopted during her veterinary school days—were her constant companions.

Dr. Cadile really enjoyed her time in all these places, says Shannon, but “Illinois always held a special place in her heart.”

“She could light up a room with her smile, bring down the house with her hilarious stories, and instantly connect with all animals (people included) with her warmth.”

Treating All Animals as Her Family

BY IRENE CARNEY

“If you have pets, treat them as family. They can’t work or bring in money, but they give you love and happiness.”

Barbara McDonough, a New Lenox resident, has lived by these words through good times and bad. A hairdresser for “so many years,” McDonough recalls, “There were times my pets got sick and I couldn’t afford the bill, so I would cut my living expenses to help them. I struggled, but it was worth it.”

McDonough’s devotion to animals extends beyond her own pets: “They’re all like my own, and they all need loving care.” When McDonough received a financial windfall, she knew immediately that she wanted to use the money to support animals in need.

Around this time, she was connected with Dr. Ken Swiatkowski, Class of 1998, who practices at Bramer Animal Hospital in Evanston, Ill., and who provided a conduit between McDonough’s desire to help and many needy patients.

One such patient was a 13-year-old dog that needed bladder stone surgery. The owners couldn’t afford the life-saving procedure, in large part because of their own costly medical expenses. With financial help from Bramer Animal Hospital and McDonough, the dog was treated and “went on to have two more years of life,” according to Dr. Swiatkowski.

Still, McDonough wanted to do more. That’s when Dr. Swiatkowski suggested that she find out about the veterinary programs and initiatives at Illinois. Recognizing that her gift will have far-reaching impact, both in the number of animals helped and the years it will continue to provide support, she decided to establish the Genevieve B. McDonough Veterinary Medicine Fund (which uses her full name). Income from this gift will be divided between direct care for animal patients and scholarship support for veterinary students at the College of Veterinary Medicine.
McDonough shared her hopes for the recipients of her scholarship:

“I never got to go to college but I’d like to help vet students be able to do what they want to do and help animals. I hope [after they are in practice] these students remember what it was like to need financial help and give the same kind of support I am providing them to pet owners who need financial assistance to care for their pets.”

Association’s Scholarship Honors Longtime Leader

BY IRENEA CARNEY

Dr. Gene Gambrel, a 1955 veterinary graduate of Michigan State University, dutifully arrived for a special board meeting of the Northern Illinois Veterinary Medical Association (NIVMA) taking place at his favorite restaurant in his hometown of Winnebago. But he was not expecting what was on the agenda.

“I was very surprised, very humbled,” recalls Dr. Gambrel, when his fellow board members handed him a document detailing the organization’s new scholarship for Illinois veterinary students: the Dr. Gene Gambrel Northern Illinois Veterinary Medical Association Scholarship.

Dr. Abe Trone, an NIVMA member, said the organization’s leaders felt Dr. Gambrel was “the obvious choice” to be recognized through the scholarship.

“He is a passionate and dedicated veterinary professional who has invested so much time and energy into the NIVMA,” says Dr. Trone. “He’s served on the board since its early days. He was the glue that kept things together and consistent.”

The scholarship was first awarded in 2015, to Kirsten Plomin. The 2015 Illinois graduate met the scholarship’s criteria, including being native to northern Illinois, intending to practice in that region, and being involved in organized veterinary medicine.

Dr. Kelli Kramer, a board member of the NIVMA who helped establish the scholarship, emphasizes that “the main goal of the scholarship is decreasing financial burden on veterinary students. If we can’t find a candidate that fits all these criteria, we’d rather the scholarship go to any student than not be awarded at all.”

Dr. Gambrel is particularly pleased that this scholarship will encourage students to be involved with veterinary associations.

“If you get involved in association work, the return in friendships across the state and the country is priceless,” he says. “Even in retirement, I still have fun going to the meetings. I get to see old friends and make new ones.”
Students Get Fair Share of Animal Experience

In 2015 for the first time, student volunteers and hospital staff from the college provided on-site veterinary care for two weeks, from setup to teardown, at the Illinois State Fair in Springfield.

Lynsee Melchi, Class of 2017, wrote a blog post about her experiences as part of the team that provided on-call services for all species, helped care for the sows and piglets in the Illinois Department of Agriculture’s farrowing barn exhibit, and assisted the state veterinarian’s team in collecting samples from the champion show animals.

Enjoy these highlights, then visit our website to read the entire post.

First, and as you might expect, the state fair is a veritable smorgasbord of animals. Just about any breed imaginable is there for your viewing pleasure. Not quite sure how a Chianina stacks up to a Charolais? No problem. Head on over to the cattle barn and you can clear that up instantly. From Duroc to Shropshire to Percheron, the fair has it all!

Besides the curiosity factor, the ability to recognize species can be important for a veterinarian. A doctor gains trust from small things, like pronouncing a client’s name properly, shutting gates behind you, and whether or not that red animal is a Hereford or Shorthorn, heifer or cow. It can be hard to believe your veterinarian’s medical advice if she/he can’t even identify your animal properly. Having the animals in front of your face is more helpful than any PowerPoint when it comes to remembering breeds.

… Appearance is everything in the ring and a veterinarian needs to be sensitive to this. I gave an injection to a heifer that was yet to be shown and instead of picking a drug that would be injected in the neck we chose one that worked just as well, but was injected at the base of the ear. Show animals are traditionally injected in the neck on the left side because the right side of the animal faces the judge. Giving a compound behind the ear leaves the least possibility of any show ring blemish.

… Networking, networking, networking is always on a veterinary student’s mind as we get a feel for the professional world we will step into after graduation. We got the opportunity to work side by side with Dr. Mark Ernst, Illinois state veterinarian, as well as being able to meet future clients. We also bumped into a number of recent Illinois grads as we made our way through the various livestock barns. The Illinois State Veterinary Medical Association was kind enough to buy our team lunch on one of the days. The Internet may be a great resource for connecting with anyone in the world, but I don’t think it compares to chatting over pork chops-on-a-stick in the commodities pavilion. The fair was the perfect environment for meeting all sorts of people in the agricultural world.

Student Volunteers Foster Pets’ Second Chance at Forever Home

BY NORA MCKAY

Old, sick, and homeless, River was in a very difficult position. At a typical animal shelter, this sort of pet doesn’t stand much of a chance at adoption when so many young, healthy, and eager animals are available.

Luckily for River, he found a new home through Hospice Hearts, a non-profit, all-volunteer animal rescue organization that helps cats and dogs whose owners are no longer able to care for them due to nursing home admission, serious illness, or death. Veterinary students from the University of Illinois have played a big role in making Hospice Hearts successful since it was founded in 2015.

Emily Wechter and Kelsey Stocks (shown below, with River) serve on the board of directors for Hospice Hearts. Wechter serves as the medical coordinator, and Stocks serves as the adoption coordinator.

And many veterinary students—including Stocks and Wechter—happily offer their homes to provide foster care while animals await adoption.

River, who was adopted by Wechter, has become something of an unofficial “poster child” for Hospice Hearts.

“When I got River to foster, he was only expected to live for two more weeks. He was old, sick, and had countless health problems,” says Wechter. “But one day, he became exponentially better. Today, River is doing wonderfully and made the best recovery I can imagine.”

“We are all very passionate about what we do. My favorite part about volunteering is how grateful these animals are,” says Stocks. “These are old animals with really sad stories, but they are certainly loved.”
Dr. Bianca da Costa Martins, an assistant professor of ophthalmology who recently joined the Veterinary Teaching Hospital in Urbana, has started a corneal tissue bank to enable potentially sight-saving and life-saving transplants to restore strength to damaged or infected corneas in horses or dogs.

“The purpose of this bank is to have corneas available for patients that would benefit from a corneal graft,” said Dr. Martins. “That includes horses with an abscess in one of the layers of the cornea as well as horses and dogs with such conditions as deep corneal ulcers, corneal perforation, and iris prolapse, which is when there is a hole in the cornea and the colored part of the eyeball starts to come out.”

The bank will use the healthy corneas of patients who are euthanized at the Veterinary Teaching Hospital only if the owners choose to make the donation.

“We understand that this is a grieving time for the client. It may be of comfort to know that their beloved animal’s corneas could save the eyeball, eyesight, and even the life of other patients,” said Dr. Martins.

The corneas are frozen and stored at -80 degrees Celsius, which preserves viability for use for up to one year.

“The corneal cell walls will be devitalized by the cold temperature, and the graft will be basically a rich source of thick collagen,” explained Dr. Martins.

Although the introduction of new, foreign tissue into a body in a graft always carries a risk of complications, corneal transplants have a high success rate.

“We define a positive outcome as a restoration of the corneal integrity. An opaque graft in a comfortable but non-visual eye is considered successful,” said Dr. Martins. “In horses undergoing corneal transplantation, a positive outcome is observed in 78 percent to 98 percent of the cases.”

**FAQs about the Corneal Bank at Illinois**

**What about creating a corneal bank for cats?** Because the graft procedure is more complicated in cats, Dr. Martins is starting her program with dogs and horses. Cats may be included in a later phase of the program.

**Can I sign up to donate my animal’s cornea?** Because the tissue has to be collected by a trained veterinarian within an hour of the death of the donor animal, only owners whose animals are euthanized at our hospital will be asked to consider donating the tissue.

**Is this just like a cornea transplant for people?** Not exactly. Because it is cost prohibitive to do live-tissue transplants for animals as is done routinely for people, the transplanted tissue that has been cryopreserved will be opaque. It restores the structure of the eye when part of the cornea must be removed because of disease or injury. However, the animal often can still see with the remaining part of the eye.

**Memorial Donations Support Eye Care Research**

Another innovation pursued for animal patients combines the benefits of surgical treatment and the ease of topical drops.

Superficial ulcers are easier to treat and heal, but deep, complicated, or infected ulcers generally need more help. They are often painful, and patients respond to the pain by rubbing their eyes, ultimately making the ulcer larger and deeper.

Left untreated, an ulcer may get infected and progress to complete perforation of the cornea. In severe cases the entire eye may need to be removed.

Recently, Dr. Bianca da Costa Martins has been investigating the use of amniotic tissue in the healing of ulcers, with help from a seed grant awarded through the Companion Animal Memorial Fund.

“The amniotic membrane is the inner layer of the placenta, the one in contact with the fetus. It has several properties and compounds that are beneficial in the healing process: it decreases the inflammatory process, fights collagen degradation, and decreases scar formation,” said Dr. Martins.

This membrane can be safely taken after the normal delivery of a foal from tissue that is usually discarded. Amniotic tissue is already being used in the surgical treatment of corneal ulcers, typically leaving less scarring and a more transparent cornea than a traditional conjunctival graft taken from the membrane that covers the eye and the inside of the eyelid.

Dr. Martin’s newest research involves a liquefied amniotic tissue called amniotic membrane homogenate.

“The amniotic membrane homogenate is meant to be used topically as an eye drop and is showing promising results,” reported Dr. Martins. An eye drop-based treatment may allow for a less invasive way of healing the cornea and could eliminate the need for surgery in some instances.

With these advances in ulcer treatment, animals with a corneal ulcer have a better chance of retaining their vision.
Victory for Vie

One little puppy, bright and eager for life, presented a remarkable opportunity for learning and service at the Veterinary Teaching Hospital last November.

Vie is a border collie from Milwaukee, Wis., whose name is the French word for “life.” When Vie began having seizures at only 3 months old, her owners ended up exhausting their funds to find out what was wrong. The answer: a very rare congenital brain disorder called meningoencephalocele.

Illinois alumnus Dr. Robert Rushing, a boarded veterinary neurologist who earned his DVM in 2008, made the diagnosis. He is currently part of a multi-clinic specialty practice in the Milwaukee area. Given his Illinois connection, he suggested that Vie’s owners turn to the University of Illinois for help, and thanks to generous donations to the Friends of the Veterinary Teaching Hospital fund, we were able to say yes.

Veterinary neurologist Dr. Devon Hague seized this “once-in-a-lifetime opportunity” to do what she is here to do: save animals, educate future veterinarians, and advance medicine.

Dr. Hague led the surgical team along with oncologic surgeon Dr. Laura Selmic. Dr. Rushing even traveled to Urbana to scrub in on the unusual procedure that involved removing the brain tissue that was abnormally protruding into Vie’s nasal cavity.

Vie came through the six-hour brain surgery with flying colors and is expected to lead a full and healthy life.

So Much to Bear

The story of Bear, the brown Lab mix, has a tragic beginning but a happy ending.

In April a man contacted police to report that he had found a dog hanging by a leash from the side of a bridge, its muzzle wrapped with electrical tape.

Once Bear was brought to the Veterinary Teaching Hospital, further evidence of abuse and neglect was discovered: extreme dehydration, chronic skin ulcers, a leg wound, an eye infection, hypothyroidism, and, most devastating, a gunshot wound that shattered his jaw and left a bullet lodged in the bone.

In an outpouring of concern, the public made gifts to the college’s Friends of the Veterinary Teaching Hospital fund, which were applied to the cost of more than two weeks of intensive care. In addition, a veterinary technician from Ford County, where Bear had been found, set up a fundraising page that brought in more than $20,000, enough to cover the remainder of Bear’s hospital bills with plenty left to help other Ford County animals in need.

When he was well enough to leave the hospital, Bear was adopted by a new owner selected by the law enforcement and animal control officers in his hometown.

“The one thing that keeps us positive in a situation like this where an animal has been abused is to see the response from people who want to donate towards Bear’s care and offer to give him a good home,” said Dr. Maureen McMichael, who heads the hospital’s small animal emergency and critical care service.

“Bear got a lot of love here at the hospital. Love 24-7,” she added.
Making It Possible to Say ‘Yes’

BY IRENKA CARNEY

Dr. Gary Stamp, Class of 1970, feels especially lucky in looking back at his career. Not only has he loved being a veterinarian, but he feels fortunate that, as a veterinarian in the military, he was able to practice medicine “guided by the animal’s needs rather than by financial limitations.”

Dr. Stamp and his wife, Mary, know all too well that animals are often under-treated or put down for lack of money. Believing that “this is tragic, and those who can help should help,” the couple recently established the Dr. Gary and Mary Stamp ER/ICU Endowment Fund to help cover the cost of care for pets admitted to the emergency room or intensive care unit at the college’s Veterinary Teaching Hospital, when the owners do not have the necessary funds.

In the current economy, Dr. Maureen McMichael, who leads the hospital’s small animal emergency and critical care service, encounters more and more owners who can’t afford the care their pet needs.

“The ability to say yes to these owners is the greatest feeling in the world,” says Dr. McMichael, “and people like Mary and Gary Stamp make saying yes possible.”

For the Stamps, this gift arises from their shared passion for helping humans and animals in need.

Mary Stamp earned bachelor’s and master’s degrees in speech/language pathology and specialized in the field of early intervention development. Rescuing animals, even saving their dog Charlotte, and supporting the local humane society and animal rescue have always been a passion for her.

Dr. Stamp spent 28 years on active military duty, first with the U.S. Air Force and later with the Army Veterinary Corps, where he attained the rank of Colonel. He helped to found the Veterinary Emergency and Critical Care Society (VECCS) and was a charter diplomate of the American College of Veterinary Emergency and Critical Care. Since retiring from the military in 1999, Dr. Stamp has served as executive director of VECCS. He was honored with the college’s Dr. Erwin Small Distinguished Alumni Award in 2006.

Dr. Stamp summed up the couple’s motivations for their gift saying, “I’ve seen so much animal suffering guided by financial restrictions. Mary and I feel that we have been very blessed and want to do whatever we can to help animals and families.”

Coming Soon…The Gold Standard for Imaging, More Clinical Specialists

The big white trailer parked just south of the Large Animal Clinic these days is a sign of things to come.

The GE 1.5-Tesla magnetic resonance imaging (MRI) unit inside arrived in early June. It delivers advanced imaging sequences for small animal patients while the hospital undergoes construction to make way for a 3-T MRI, which is expected to be operational by mid-December 2016.

High-field MRI represents the gold standard in veterinary medicine for examination of the central nervous system and for imaging the equine distal limb. It is an emerging tool in oncology and in cardiology for exploration of cardiac structure and function.

The college will be welcoming several new clinical faculty members as it expands the neurology and cardiology services.

Among new faculty members arriving this fall are:

- **Dr. Daniel Duffy**: BVetMed, Royal (Dick) School of Veterinary Studies, University of Edinburgh; residency in small animal surgery, Purdue University
- **Dr. Kari Foss**: DVM, University of Illinois; internship, Southern California Veterinary Specialty Hospital, Irvine; master’s degree and neurology residency, Ohio State University; diplomate of the American College of Veterinary Internal Medicine (Neurology)
- **Dr. Lynelle Graham**: DVM and residency, University of Minnesota; diplomate of the American College of Veterinary Anesthesia and Analgesia
- **Dr. Efa Llewellyn**: BVetMed and internship, Royal Veterinary College, London; residency in small animal emergency and critical care medicine, University of Minnesota
- **Dr. Jennifer Reagan**: DVM, Washington State University; residency in small animal surgery, University of Illinois
- **Dr. Katie Smith**: DVM, University of Illinois; internship, Peterson & Smith Equine Hospital in Florida; combined PhD and ophthalmology residency program, Oklahoma State University
- **Dr. Miranda Vieson**: DVM, Ohio State University; residency and PhD candidate, Virginia-Maryland College of Veterinary Medicine; diplomate, American College of Veterinary Pathologists, Anatomic Pathology
- **Dr. Jordan Vitt**: DVM, Ohio State University; internship, University of Pennsylvania; cardiology residency, Texas A&M University
**Superhero Day**

*Dynamic Duos and More:* At the second annual Superhero Day on June 3, T-shirts proclaiming “Our Superhero: IAN” were everywhere. The event remembers the brave life of the four-year-old son of veterinary imaging technician Caroline Wagner, Ian, who died in 2014. This year Wagner’s extended family participated in the day, bringing snacks, drinks, and superhero wristbands to share. Barbara Wilson, interim chancellor of the University of Illinois at Urbana-Champaign, and Dean Peter Constable were on hand to honor Ian and to celebrate the super contributions made by hospital staff.

**Vote for Knap:** Kim Knap, a veterinary technician and canine rehabilitation practitioner at the Veterinary Teaching Hospital, is one of five technicians in the running for the 2016 American Hero Veterinary Technician Award, sponsored by the American Humane Association and Zoetis. The winner will be determined by public voting online through July 21 at herovetawards.org/vote.

*Memorial Fund Comforts Clients, Supports Discovery*

The college’s Companion Animal Memorial Fund provides veterinary practices with a means to actively express sympathy to grieving clients. This program has provided over $2 million for non-invasive teaching, research and service projects since it was founded in 1984.

Participating clinics make a suggested minimum $10 donation per pet, and the college sends the animal owner a memorial card that acknowledges the clinic’s thoughtful gift.

To learn how to participate, please call the Office of Advancement at 217/333-2762 or advancement@vetmed.illinois.edu.

Thank you, clinics participating in the Companion Animal Memorial Fund in FY2016.

*(All practices are in Illinois, except as noted)*

**PLATINUM: $2,500 or more**
- Animal Medical Center of Itasca
- Becker Animal Hospital, Northfield
- Bramer Animal Hospital, Evanston
- Capitol Illini Veterinary Services, Springfield
- Dundee Animal Hospital
- Fairchild Animal Hospital, Danville
- GreenTree Animal Hospital, Libertyville
- LePar Animal Hospital, Evergreen Park
- Lombard Veterinary Hospital
- Niles Animal Hospital

**GOLD: $1,000–$2,499**
- Animal Ark Veterinary Clinic, Chicago
- Animal Medical Center of Litchfield
- Bellwood Animal Hospital, Rockford
- Bloomingdale Animal Hospital
- Bortell Animal Hospital, Bloomington
- Country Court Animal Hospital, Buffalo Grove
- Crestline Veterinary Clinic, Charleston
- Danada Veterinary Hospital, Wheaton
- Deer Grove Animal Hospital, Palatine
- Duke Animal Hospital, Chicago
- Four Paws Animal Hospital, O’Fallon
- Fox Animal Hospital, Evanston
- Fox Valley Animal Hospital, Crystal Lake
- Gateway Veterinary Clinic, St. Charles
- Green Bay Animal Hospital, Wilmette
- Hyde Park Animal Hospital, Chicago
- North Center Animal Hospital, Chicago
- Peotone Animal Hospital
- Pets First Veterinary Clinic, Chicago
- River Ridge Animal Hospital, Dixon
- Saint Francis Pet Crematorium, Wood Dale
- State Street Animal Clinic, Belvidere
- Wheatland Animal Hospital, Naperville

**SILVER: $750–$999**
- Animal Wellness Center of Pontiac
- Freeburg Animal Hospital
- Freeport Animal Hospital
- Gill Veterinary Clinic, West Salem
- Hamilton Animal Care, Allentown, Pa.
- Lake Forest Animal Hospital
- Mulford Animal Hospital, Rockford
- Mundelein Animal Hospital
- Pine Bluff Animal Hospital, Morris

**BRONZE: $500–$749**
- Arcola Animal Health Care Center
- Auburn Veterinary Service
- Brunswick Animal Hospital, Normal
- Christensen Animal Hospital, Wilmette
- Frost Family Pet Clinic, Loves Park
- Hawthorne Animal Hospital, Glen Carbon
- Illinois Equine Field Service, Elburn
- Meadows Animal Hospital, Champaign
- Northbrook Animal Clinic
- Paws & Claws Animal Clinic, Freeport
- River Heights Veterinary Clinic, Oswego
- Vernon Hills, Mundelein
- West Loop Veterinary Care, Chicago
Behavior Service in Chicago Delivers Hope, Saves Lives

“Luke’s first veterinarian had recommended euthanasia because of behavior problems, so the family changed vets… [Our veterinary clinic] sent him to see Dr. Ballantyne. He became a much happier dog because of her advice.”

“(Maya) is now able to stay home alone without pacing, barking the whole time, urinating everywhere, and scratching.”

“Dr. Ballantyne is a life-saver! She helped me and my husband learn how to care for our little dog Chachi and his fear-based aggression.”

Far too often, behavior-related problems drive pet owners to relinquish or even euthanize their pets. Thankfully, experts such as Dr. Kelly Ballantyne are available to offer solutions.

Dr. Ballantyne is a board-certified veterinary behaviorist who practices at the college’s Chicago-based service, Veterinary Behavior at Illinois. She describes what she does as “providing evidence-based, humane, and non-confrontational treatment for serious behavioral issues in dogs and cats.”

Those issues range from house soiling or excessive barking to separation anxiety and aggression to people and other animals.

Dr. Ballantyne earned her veterinary degree from Illinois in 2005. She joined the college’s Chicago Center for Veterinary Medicine when it opened in 2009. As her interest in behavior grew, she transitioned from primary care to behavior consultations.

After completing a veterinary behavior residency under the mentorship of Dr. John Ciribassi, a 1984 graduate of the college, Dr. Ballantyne gained board certification in 2015.

Dr. Ballantyne also teaches Illinois veterinary students about companion animal behavior, advises the staff at the Medical District Veterinary Clinic at Illinois on low-stress handling, and pursues research on the impact on owners when pets have behavior problems.

Find out more at vetmed.illinois.edu/behavior.

Dog-Lover Bequeaths Funds to Chicago Center

Irene Alkim was a woman of strong opinions. Widowed many years ago, she remained in the ground floor apartment of a three-flat on Chicago’s South Side while the neighborhood changed around her.

Among her passions was Star Dancer, a Bouvier des Flandres that was driven 150 miles south for care at the Veterinary Teaching Hospital more than half a dozen times between 1999, when the dog was diagnosed with cancer, and 2008, when the dog’s cancer had recurred and spread to the point where humane euthanasia was elected.

Ms. Alkim also passionately believed that expert care from the state’s only College of Veterinary Medicine should be readily available to the people of Chicago.

After Ms. Alkim’s death, the college received her generous bequest of nearly $1.5 million, the majority of which was designated to support the Chicago Center for Veterinary Medicine. She also established a scholarship for veterinary students, named the Michael E. and Irene M. Alkim/Joseph and Josephine Kendzierski Scholarship, in tribute to her husband and her parents.

Irene Alkim attended the grand opening of the college’s Chicago Center for Veterinary Medicine in 2009.

Dr. Ballantyne is available to offer solutions.

Irene Alkim attended the grand opening of the college’s Chicago Center for Veterinary Medicine in 2009.

Fall Conference for Veterinarians
September 22 and 23
iHotel and Conference Center, Champaign
Register at go.illinois.edu/fallconference

Outstanding continuing education at a remarkable price is not the only reason to make the college’s annual conference your go-to event this year. Expect more fun and more Illini.

Nearly two dozen Illinois alumni are on the speaker roster. We’ll be encouraging a friendly competition to see which reunion-year classes win bragging rights for most alumni in attendance.

Alumni and service awards will be presented during lunch on Thursday. At the Thursday evening social event, the Marching Illini Drumline will get the party started. Then connect with classmates and faculty or dance to the sound of the Low Wines, a band led by our own anesthesiologist Dr. Stuart Clark-Price.

As the conference closes on Friday, everyone is invited to the reunion kickoff at Papa Del’s Pizza, which recently moved to an expanded location on Neil Street and Stadium Drive in Champaign.

Oh, and there’s plenty on the conference schedule to draw you as well:

- Keynote speaker Jeanne Malnati, an expert in interpersonal and relationship dynamics (and a member of the Lou Malnati’s Pizzeria family) will open the conference, and sessions will address workplace wellness;
- A daylong track entitled “Parasites: A Tribute to Dr. Allan Paul’s Legacy” will honor the recently retired associate dean for public engagement;
- A hands-on “Locoregional Anesthesia Workshop” is being offered by new anesthesia faculty member Dr. Stephanie Keating for an additional fee;
- The food animal and equine tracks have both been expanded to two days;
- Small animal sessions will cover surgery, behavior, dermatology, neurology, cardiology, ophthalmology, and more.

The early registration deadline is Monday, September 5, 2016. Look for details in your mailbox soon, or learn more online at go.illinois.edu/fallconference.
At 25, Executive Veterinary Program Accelerates Offerings

Back in 1991, Dr. LeRoy Biehl perceived a need. As the head of the college’s Continuing Education and Public Service unit and a swine Extension veterinarian, he recognized that the swine industry was changing rapidly, and that in order to serve the industry well, swine veterinarians needed business, management, and medical skills beyond those taught in veterinary school.

That year he launched the Executive Veterinary Program (EVP) at Illinois, creating an innovative recipe for transformative professional education: bring 40 progressive practitioners together every other month to master advanced skills taught by dynamic, world-recognized experts.

Twenty-five years, 11 course offerings covering four subject areas, and 300 graduates later, EVP has become the premier post-graduate training program for veterinarians.

Now under the guidance of Dr. Larry Firkins, assistant dean in the college’s Office of Public Engagement (and a graduate of the very first Swine EVP course), EVP is about to go global.

“We have the opportunity to deliver this same high-caliber learning experience to many other facets of veterinary practice.”
—DR. LARRY FIRKINS, ASSISTANT DEAN

Swine EVP by the Numbers

The prestige associated with EVP is evident in the caliber of the participants. In April 2016, the Horizons Class (below) became the sixth to earn the EVP Certificate in Swine Health Management. These 40 veterinarians deliver veterinary care for 40 percent of all pigs produced in the United States.

Here are more facts about the 222 veterinarians who have completed the Swine EVP:

- 18 presidents of the American Association of Swine Veterinarians (AASV)
- 15 winners of the AASV Practitioner of the Year award
- 16 states represented
- 3 countries represented

Enroll Soon for Inaugural Beef Production Medicine EVP

The Illinois College of Veterinary Medicine is bringing its powerful EVP model to beef cattle veterinarians right in the heart of cattle country: The program will meet on Kansas State University’s Olathe campus, near Kansas City.

Dr. Jim Lowe, associate professor at Illinois, will spearhead this program. He is collaborating with Dr. Dan Thomson, Jones professor of production medicine in the College of Veterinary Medicine at Kansas State University, for program development. Both are internationally recognized experts in the field and will be among the featured speakers in the program.

Topics covered will enhance participants’ skills in:

- Strategic thinking and problem-solving to drive success in an ever-changing industry
- Personal and professional leadership
- Data analysis and decision-making in production
- Communicating value to the food animal industry

The Beef EVP will consist of 10 two-day modules held every other month between April 2017 and October 2018. Enrollment is limited to 40. Find out more at evp.illinois.edu.
International Experts on Stallion Reproduction to Convene

Every four years since 1992, an elite group of scientists and clinicians from around the globe has gathered to advance the field of andrology—the study of male reproduction—in horses.

This year the University of Illinois will host the Seventh International Symposium on Stallion Reproduction from August 27 to 29. The meeting is expected to draw 200 experts in equine reproduction from four continents and more than 60 countries.

Dr. Igor Canisso, an assistant professor who is boarded in theriogenology in both the U.S. and Europe, chairs the symposium’s organizing committee.

“This will be only the second time the symposium will be held in North America,” noted Dr. Canisso. Previous host countries were Sweden, the Netherlands, Germany, Brazil, and Austria.

Preventing Zoos for Emergency Response

On June 21 and 22, more than 50 representatives from Midwest zoos attended a communications workshop focused on the roles of local, state, federal, and zoological industry personnel faced with an outbreak of a foreign animal disease.

Since 2012 Dr. Yvette Johnson-Walker, clinical instructor in veterinary clinical medicine, has been delivering emergency response training focused on disease outbreak and weather-related disasters through a program called Zoo Ready. Staff from zoos and aquariums in 26 states and Washington, D.C., have participated.

“From a disease perspective, we are at the beginning of a major paradigm shift in how the U.S. plans to respond to the next major outbreak of a foreign animal disease,” said Dr. Johnson-Walker.

“Lessons learned from the highly pathogenic avian influenza outbreak in Indiana and the foot and mouth disease outbreak in the United Kingdom have highlighted the need to move away from large-scale culling as the only means of foreign animal disease mitigation.”

The Zoo Ready initiative is a collaborative effort between the USDA, the Association of Zoos and Aquariums, and the College of Veterinary Medicine’s Center for One Health.

Microsurgery Training Aids DVMs, MDs, and Researchers

Dr. Heidi Phillips, assistant professor of veterinary clinical medicine, periodically offers intensive training on the use of an operating microscope to perform dissection and cannulation of arteries and veins in the rat, end-to-end and end-to-side arterial and venous anastomoses, interpositional grafts and free tissue transfer, nerve transection, and more.

The next weeklong course takes place August 1 to 5, and enrollment is limited to three learners.

The training is individualized for human medical physicians and residents, veterinary surgeons and residents, and researchers who perform surgical procedures on laboratory animals.

Workshop Boosts Box Turtle Conservation

Boasting a lineup of “the continents’ foremost experts in box turtle natural history, behavior, movement, and health,” the Box Turtle Conservation Workshop took place May 19 to 21. Hosted by the Wildlife Epidemiology Laboratory run by Dr. Matt Allender, an assistant professor of comparative biosciences, it was the fifth in a series of workshops aimed at bringing together individuals actively engaged in research and conservation of this declining species.

The workshop combined field experience with a full slate of presentations on turtle research and education.

“Participants were invited to join the Wildlife Epidemiology Lab’s turtle team in assessing the health of box turtles using trained search dogs,” said Dr. Allender. “They also learned turtle shell repair techniques using 3D-printed shells developed from CT scans of wild box turtles.”

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Strategic Snapshot: Make a Significant and Visible Societal Impact

Illinois is a leader in wildlife and zoo discovery, education, and action.

From residency programs in zoo medicine and zoo pathology, to research efforts that span the globe, to veterinary education and service activities based in central Illinois, college programs have established reputations for excellence.

Here is a sampling of recent wildlife and zoo activities.

ZPP Research Near and Far

In addition to the studies of the effects of the Deepwater Horizon oil spill on dolphins in the Gulf of Mexico, the five faculty members in the college’s Zoological Pathology Program are engaged in numerous research projects, including:

- Canine distemper virus outbreak in the Cook County Forest Preserve, which potentially may affect not only wildlife but domestic animals
- Health management of captive and wild cheetahs
- Atoxoplasma infections in perching birds
- Diagnostic approaches for tuberculosis in captive elephants
- Long-term health status of chimpanzees in Tanzania

Research Ties Deaths of Young Dolphins to Deepwater Horizon Oil Spill

BY DIANA YATES

Scientists have finalized a five-year study of newborn and fetal dolphins found stranded on beaches in the northern Gulf of Mexico between 2010 and 2013. Their study, reported in the journal *Diseases of Aquatic Organisms*, identified substantial differences between fetal and newborn dolphins found stranded inside and outside the areas affected by the 2010 Deepwater Horizon oil spill.

An earlier study by many of the same researchers had revealed that adult bottlenose dolphins stranded in the spill zone after the spill were much more likely than other stranded dolphins to have severe lung and adrenal gland damage “consistent with petroleum product exposure.”

Dr. Kathleen Colegrove, who led the study, works in the college’s Chicago-based Zoological Pathology Program; coauthors included researchers affiliated with ten other institutions.

The study team evaluated 69 perinatal common bottlenose dolphins in Alabama, Louisiana, and Mississippi, the areas most affected by the spill, and 26 others found in areas unaffected by the spill. The work was conducted as part of an effort to investigate an "unusual mortality event" in the Gulf primarily involving bottlenose dolphins, beginning in early 2010 and continuing into 2014.

Scientists saw higher numbers of stranded perinatal dolphins in the spill zone in 2011 than in other years, particularly in Mississippi and Alabama, the researchers report. The young dolphins, which died in the womb or shortly after birth, “were significantly smaller than those that stranded during previous years and in other geographic locations,” they wrote.

Perinatal dolphins found in the spill zone were also about six times more likely to have lung abnormalities, including partially or completely collapsed lungs. Spill-zone dolphins were “particularly susceptible to late-term pregnancy failures, signs of fetal distress and development of in utero infections including brucellosis,” a bacterial infection that can affect the brain, lungs, bones, and reproductive function. Extensive testing found no evidence that an unusual or highly pathogenic Brucella strain was involved.

“These findings support that pregnant dolphins experienced significant health abnormalities that contributed to increased fetal deaths or deaths of dolphin neonates shortly after birth,” Dr. Colegrove said.

Researchers investigated the deaths of perinatal dolphins, like this one, found in regions affected by the 2010 Deepwater Horizon oil spill.
Responding to the Call of Wildlife in Distress

In October, Dr. Megan Watson (center in photo) traveled to Homer, Alaska, in response to a request for veterinary support from the Alaska Sea Life Center. Sea otters had been stranding at an unusually high rate beginning in late summer 2015. Otters play an important role in the ecosystem, so when the population is affected, something is likely affecting the entire ecosystem.

In an unusual mortality event in Alaskan sea otters that occurred between 2006 and 2010, the primary cause of death was valvular endocarditis. Last year, not only was there an increase in number of diseased otters, but the signs the otters exhibited differed from those in previous years and included neurologic signs such as tremors or seizures.

Dr. Watson was in the second year of the Illinois Zoological and Aquatic Animal Residency program, which engages residents in training at the University of Illinois, John G. Shedd Aquarium, and Brookfield Zoo. While in Alaska, she assisted with numerous sea otter responses, necropsies, sampling, and teaching volunteers and local university students.

“I was able to help alleviate suffering for numerous otters on local beaches and help collect important samples to provide pathologists with valuable information,” she said. “Thanks to the rescue, research, and rehabilitation efforts of Shedd Aquarium, I feel lucky to have been a part of helping these incredible animals and collecting data that will help the population and ecosystem.”

Bobcat Bounces Back from Broken Pelvis

The College of Veterinary Medicine small animal surgery team and Wildlife Medical Clinic provided a lucky break to a young female bobcat from Indiana.

The animal was only six months old when it was struck by a car in Bloomington, Ind., on November 24 and sustained a fractured pelvis. WildCare Inc., a Bloomington wildlife rehabilitation facility, paid for radiographs to evaluate the cat’s condition, but was unable to cover the cost of the orthopedic surgery deemed essential for its long-term survival.

Because bobcats play a crucial role in maintaining a healthy diversity of species, wildlife experts were anxious to promote the animal’s recovery and return to the wild. Bobcats had been listed as an endangered species in Indiana for almost 40 years.

“We had nearly given up hope after finding out that it would cost $6,000 to $8,000 for the procedure here in Indiana,” read a post on the WildCare Inc. website. That’s when they contacted Dr. Julia Whittington, medical director at the Wildlife Medical Clinic. Surgeons at the Veterinary Teaching Hospital agreed to perform the procedure at a discounted price, and the bobcat was moved to Illinois. On December 2, a team of surgeons led by Dr. Tisha Harper successfully stabilized the animal’s pelvis during a four-hour surgery.

The care for this animal was an unusual but warranted expense.

“Rarely do members of the Wildlife Medical Clinic have the chance to impact an ecosystem in such a significant way with one animal,” said Dr. Nichole Rosenhagen, who is completing a wildlife medicine internship at Illinois.

After six weeks of post-operative care by the volunteers in the Wildlife Medical Clinic, the bobcat was transferred back to WildCare Inc. to rebuild her strength and learn to be a bobcat again. In late May she was released back into the wild.

In announcing the bobcat’s release, WildCare Inc. leaders noted, “We know she’s an excellent huntress and has the skills she needs for a successful life in the wild.”
Second Annual Wellness Visit to Wildlife Park Makes News

For two weeks in April, fourth-year veterinary students got lots of hands-on experience examining a variety of species during a pre-graduation ‘professional development’ course at the Wildlife Prairie Park near Peoria, Ill.

The course was first offered in 2015, so students, faculty, and park staff alike were eager to see if health recommendations implemented since the earlier visit had paid off.

Bears, badgers, bobcats, and more had been labeled overweight, and keepers were instructed to change the makeup of the animals’ diets and also to vary the location of the food, or even hide it, to encourage more activity.

News of the impressive results—the two black bears dropped a combined 206 pounds, for example—appeared in the Washington Post and the Chicago Tribune under the headline “Unsurprising Diet Secrets of Zoo Animals.”

Dr. Julie Whittington, who, along with Dr. Matt Allender, organized and delivered the course, was also an invited guest on the NPR-affiliate radio station’s new talk show, The 21st.

When asked what advice she would offer pet owners about helping their pets trim down, Dr. Whittington said, “I would give the same advice I would give to a person: that there is no substitute for decreasing the calories, increasing the quality of the diet fed, and exercise.”

Many people had a hand in the impressive weight loss seen in the park’s black bears over the past year.

New Scholarship Memorializes Wildlife Clinic Volunteer

As a student volunteer who cares for the Wildlife Medical Clinic’s resident birds of prey, Stephanie Dantino, Class of 2017, says the birds have taught her perseverance.

“Working with our residents is very different from working with a dog or cat. Often the birds would not want to participate in training activities,” said Dantino. “I learned pretty quickly that one cannot give up. If you keep trying, you eventually form a bond with the resident and then on there is mutual trust.”

In April Dantino became the first recipient of the Rose Ann Meccoli Memorial Scholarship. Meccoli worked at the college for more than 35 years as a parasitology technician, and volunteered for more than 20 years at the Wildlife Medical Clinic, before her death in 2015.

Meccoli, too, understood perseverance. Even after being partially paralyzed by a stroke, she continued to volunteer at the clinic and demonstrate a fierce commitment to helping injured or sick wildlife.

“Rose Ann served as the primary caregiver for the clinic’s resident educational animals as well as for hundreds of wild bird, mammal, and reptile patients,” said clinic medical director Dr. Julie Whittington, who established the scholarship. “Any animal in her charge never knew a more caring advocate or more pampered lifestyle.”

Rose Ann Meccoli, second from left, shared her love of the resident birds of prey with the public. In this photo, she is bringing the birds to a medieval fair with veterinary students (from left) Paula Roney, Class of 2006, holding Odin; Cristina Hansen, Class of 2007, with Pistol; Lindsay Schroeder, Class of 2007, with Penelope; and Kate Brucker, Class of 2006, with Nokomis.
Regal Eagles: One Patient Finds a Home, Another May Fly Again

Two bald eagles have been prominent patients at the Wildlife Medical Clinic recently.

One, thought to be about five years old because of her white head and tail feathers, arrived at the college in March 2015 after she was observed “swimming” in the Illinois River near Peoria. Her rescuers realized that the bird was in fact struggling to stay afloat because of severe injuries to her lower right wing, which had to be amputated.

After the wound had healed, the search for an appropriate nature center to house this now-flightless eagle was unsuccessful. This bald eagle responded surprisingly well to human contact and training, and so the Wildlife Medical Clinic applied for and received permission to keep her as a resident teaching animal.

Now efforts are under way to raise money to build a flight cage that can accommodate this new, larger resident, the first bald eagle that will be a permanent resident at the clinic. Make a donation online at vetmed.illinois.edu/eagle/.

Another injured bald eagle arrived in mid March 2016. This one was transferred from a rehab facility in southern Illinois because she needed advanced medical care. After a CT scan revealed that her humerus had been fractured by a gunshot and had healed with the bone out of alignment, a reconstructive surgery was performed on May 5.

Renowned avian surgeon Dr. R. Avery Bennett rebroke the humerus and secured the bone in correct alignment using special lightweight hardware. As an aid to the surgeon, 3-D printed models of the eagle’s broken and healthy humerus bones were created based on data from the CT scan. The procedure went smoothly, and the bald eagle is recovering well.

At a cost of more than $3,000, the eagle’s surgery and care far exceeds what the Wildlife Medical Clinic would typically spend on a single patient.

“We believe she is a very good candidate for release,” said Dr. Nichole Rosenhagen, a veterinarian who is completing an internship at the Wildlife Medical Clinic.

“If we can get her flying, this animal is looking at a potential lifespan of at least 30 years, so the investment now is worth the chance for her to have a long and productive wild life.”

Gift Stimulates Healing, Learning

Kris Fitzpatrick was the first person to hire Dr. Julie Whittington at the University of Illinois. However, Whittington was not a doctor at the time.

Fitzpatrick, who spent 30 years on the campus police force, was a captain when Whittington applied for a position as an officer. She recalls Whittington saying “This isn’t a lifelong career for me. I want to finish my bachelor’s degree and become a vet.”

Fitzpatrick was a little skeptical, but she grew to truly admire Julie’s tenacious spirit and genuine caring. She watched as Whittington earned her veterinary degree and later returned to the college to lead the Wildlife Medical Clinic and mentor the 100-plus veterinary students who volunteer there each year.

Fitzpatrick, a long-time supporter of the clinic and a member of its community board, recently made a gift of a cold laser therapy unit. “I make an annual donation and participate in fundraising events each year, and those funds are needed for the daily basics of running the clinic,” said Fitzpatrick.

“The animals are the priority for the clinic, but by allowing the clinic to enhance its care with laser therapy, I not only help the animal patients but also allow Julie to enrich the learning experience for the student volunteers.

“Shes is exposing students to this form of therapy, and they will carry that knowledge forward to help thousands of future animal patients.”

Cold lasers, also known as low-level lasers, are used to reduce pain, inflammation, and scarring while helping cells regenerate and heal faster. Here a red-tailed hawk is receiving therapy for an injured wing.
Retirements

Born to Be a Veterinarian

BY TOM HANLON

You might say that Karen Campbell was born into veterinary medicine. Her parents both grew up on dairy farms, and her father was a professor of dairy husbandry as she was growing up. In addition, both sets of grandparents lived on dairy farms.

“My parents were very indulgent and let me have every kind of pet I wanted, including hatching chickens and turkeys in our basement and then turning them loose on the farm,” Dr. Campbell says.

Dr. Campbell, who has served as head of the Department of Veterinary Clinical Medicine since 2011, retired in December, after 33 years at the College of Veterinary Medicine.

“It’s been quite a privilege to work at the University of Illinois,” Dr. Campbell says. “This is a great university with a great heritage. My dad was a strong proponent of land-grant institutions, of universities that are for the people, and I think Illinois is a wonderful example of that. We touch a lot of lives with the work that we do at the veterinary college.”

Dr. Campbell grew up in Missouri and received both her bachelor’s degree and her veterinary degree from the University of Missouri, which named her Alumna of the Year in 2014. She also received an American College of Veterinary Dermatology Award of Excellence in 2013.

“Gifted Clinician”

“Karen is an outstanding and gifted clinician with a long history of dedication to the University of Illinois,” says Dean Peter Constable. “She has authored or coauthored a number of texts, including one—Small Animal Dermatology, 7th Edition—that is regarded as one of the standard worldwide texts on animal dermatology.”

Dr. Campbell spent her career in small animal medicine, no doubt spurred by her early experiences on her grandparents’ farms and in her work during high school with a mixed-animal practitioner, who did a bit of everything and was on a first-name basis with most of his clients.

“From that experience I learned that while veterinary medicine is about the animals, it’s even more about interacting with people and helping them to provide the best quality of life for their animal, whether it’s a farm animal or pet,” Dr. Campbell says. “And that’s something I loved so much that being a veterinarian has never felt like work, it was just fun.”

While she has been in the classroom and administrative offices for some time, she still gets to work with clients and animals, primarily through the interns and residents she guides.

“I would still go down and see patients with the residents and talk with them about what they’re doing with those patients on a daily basis,” she says.

Discoveries in Skin Barrier Function

In her research in veterinary dermatology, Dr. Campbell has contributed heavily to the understanding of skin barrier function, including the role that nutrition has on skin barrier function, and how alterations in skin barrier function predisposes animals to various diseases.

“What’s been rewarding, particularly for dogs, the species I work with most, is that through advanced imaging techniques it’s been determined that skin barrier dysfunction is more important than the immune system for the development of the disease,” Dr. Campbell says. “The defect is first in the barrier function and that causes the animals to be more exposed to allergens and the immune system becomes involved at that point.”

Of her research, Dean Constable says, “Her focus on barrier function originally is one of the things that helped get that discovery in progress.”

Wide-scale Changes

Dr. Campbell has seen a lot of change in the college and the veterinary field in her 30-plus years at Illinois.

“When I started in veterinary medicine, fewer than 10 percent of students were women,” she says. “Now it’s about 10 percent men. Also, when I started, it was a general James Herriott kind of veterinary practice, and now pretty much every specialty that’s present in human medicine is present in vet med as well.”

Dr. Campbell also notes that the way instructors teach, aided in part by technology, is much more hands-on, a great improvement over the old chalkboard days. But the biggest change, she says, is in the diagnostic tests that are available.

“When I was in school, all we had were radiographs,” she says. “Now we have radiographs, we have ultrasonography, we have CTs and MRIs, so you can image the whole animal in great detail. None of that was possible 30 years ago.”

Will Miss Students, Faculty

Technology and diagnostic tools aside, what she will miss most is the people.

“I loved the day-to-day interaction with faculty, the ability to be on the cutting edge of your profession. I loved teaching the students and being able to share in the excitement of understanding principles and being able to apply those principles to the patients they’re working with. All of that was very rewarding. I will miss the clients and animals that I’ve gotten to work with here as well,” she says.
One of her greatest joys was in training 15 residents, all of whom are now veterinary dermatologists. “And six of them have spent at least parts of their careers teaching at other colleges of veterinary medicine, and each of them is training additional residents,” she adds. “So I’m proud I helped spawn this group of veterinary dermatologists that is now going out and helping people in many other states.”

Dr. Campbell looks forward to spending more time with her family and doing a bit of traveling in retirement. But the girl who grew up with veterinary medicine in her blood is not giving up her lifelong love. “I intend to stay in veterinary dermatology in some capacity,” she says. “I’m exploring what that looks like. I’m not ready to give that up yet!”

Retiring, Not Slowing Down

BY TOM HANLON

Ask Duncan Ferguson about retiring and the first person he brings up is Fred Kummerow. Three decades after Dr. Kummerow retired at age 71, the Illinois professor emeritus continues to do research. “I learned from him that you need to keep your brain active,” says Dr. Ferguson, who is retiring in December as department head of Comparative Biosciences and in August 2016 from the University of Illinois.

Dr. Ferguson was raised in the Northeast and spent a major portion of his career in the South before coming to the University of Illinois about 10 years ago. “One of the things that attracted me was the hardworking and forthright attitudes of the staff at the veterinary school,” says Dr. Ferguson. “The people at Vet Med are salt of the earth people.”

Fitting in at Illinois

The position was a good fit for Dr. Ferguson because two of his passions—endocrinology and toxicology—are strong components of the department. “Duncan is widely regarded as a global authority on domestic animal endocrinology, particular related to thyroid disorders,” says Dean Peter Constable. “He is also one of the leading clinical pharmacologists in veterinary medicine. He has a unique perspective because he is board certified in both veterinary internal medicine and clinical pharmacology. There are very few people with those dual credentials.”

Dr. Ferguson finds the collaborative environment at Illinois refreshing. “Biologists tend to be very singular in their research, with an individual investigator,” he says. “With funding becoming more difficult, doing research in a collaborative way is so important. We’re working to help our junior faculty engage in the research that’s most likely to get funded, which is collaborative research, and yet still get promoted, because our traditional ways of promotion have been on individual achievement.”

Dr. Ferguson takes pride in how his department has built a strong mentoring system for junior faculty. “It’s more difficult today than it was when I came through for junior faculty to succeed on individual accomplishment,” he says. A mentoring system that focuses in part on interdisciplinary collaborations helps.

Advocate for the New Curriculum

Not long after Dr. Ferguson came to Illinois, the college began developing the new Illinois Integrated Veterinary Professional Curriculum. “It was an exciting time for me,” he recalls. “Our department was the first out of the block because we were responsible for the first year of the curriculum. The challenge was to reduce the content so students could be in the clinic for eight weeks of the year. I had gone through a similar process of course content reduction at the University of Georgia, so a lot of my message was, ‘It’s going to be okay.’”

Dr. Ferguson was all for the curriculum change, and his experiences with students influenced his research in ways he hadn’t anticipated. “We were expecting students to come in all fired up and have great ideas for the clinic,” he says, “but I got the sense it was overwhelming for them. So we modified the two-hour-a-week thread throughout the first year that we call ‘Clinical Correlations’ to focus more on developing the thought processes of a clinician.”

This experience led Dr. Ferguson to research critical clinical thinking education. He received a Fulbright fellowship to study the topic in Germany, and he is still collaborating with German students as well as with Professor Bill Cope in the College of Education, Cheng Zhai in the Department of Computer Sciences, and Willem (Callie) Els in the College of Medicine.

“We don’t want to wait to teach our students how to think like a doctor,” he says. “It doesn’t just happen when you put a white coat on. We need to teach the students in the sciences to think like a scientist. That’s the most important thing we can do.”

Worldwide Web of Collaborations

In 1990, Dr. Ferguson cofounded the Veterinary Information Network (VIN), a website where veterinarians across the world can share ideas, learn from each other, and tap into
professional resources. According to VIN’s website, the group has 53,000 members.

While he is no longer actively involved in running VIN, through it, Dr. Ferguson contributed heavily to the profession, and it changed his outlook on veterinary education.

“It led me to think about how I taught,” he explains. “Students can look things up if they know how to process the information. They need to realize they’re just being taught the tip of the iceberg and they can draw from the faculty, but they will have to constantly review, learn, and find ways to connect their learning to their profession.”

Past Highlights, Future Plans

Dr. Ferguson says he greatly enjoyed working with his wife, Margarethe Hoenig, Dr. med. vet., PhD, who retired from the college last year. “We’ve done collaborative research together going back to our time at the University of Pennsylvania,” he says, which stretches back to the late 1970s.

He also accompanied his wife on many international study trips, which took him to Asia, Germany, South America, and Tanzania, to name a few spots. These trips were impactful for students, as he continues to learn years later when encountering former students.

“Hearing how we helped them in their career is always a highlight,” he says.

Officially retiring this summer, Dr. Ferguson plans to stay busy: to travel, hike, hone his skills in classical guitar—he plays a lot of Celtic music, which is part of his heritage—and spend more time with his daughters and grandchild.

“I have plans to continue my educational research,” he adds. “I want to figure out how we can make it easier for faculty to spend more time with students in applying information as opposed to just delivering it.” Dr. Ferguson says he is working on an educational model to share basic science instruction that can be used around the world.

Citing Dr. Kummerow’s example, he says: “I’m going to remain physically active and keep my brain active. Whether it’s in the context of academia or something else, I’m going to remain active.”

Free to Return to Full-time Science

BY TOM HANLON

In his 30-plus years at the College of Veterinary Medicine, Dr. Mark Kuhlenschmidt has seen a huge gender shift in the veterinary student body, technological explosions in how research is conducted, and many advances in veterinary medicine.

One thing, though, has remained constant: the freedom to conduct research with a diverse group of talented colleagues.

“The University of Illinois is right up there with the very best research universities in the world,” says Dr. Kuhlenschmidt, who is retiring in December from Illinois and from his position as interim head of the Department of Pathobiology. “The freedom to which you can interact with other colleagues and explore science—completely free so long as you fund it—is fostered here. The U of I is an amazing place.”

The key to being able to do that research is to attract and sustain funding. And that is something Dr. Kuhlenschmidt has consistently done since he first stepped onto campus in 1984.

“Nowadays to secure funding, it’s tough,” he says. “It’s the most competitive I’ve seen in 30 years. So being able fund my research for 30 years is probably, in the large picture, what I’m most proud of.”

Contributions in Infectious Disease

Dr. Kuhlenschmidt can also be proud of his research achievements, particularly with rotavirus infection in pigs.

“When we first started working with rotavirus infection a long time ago, we developed some model systems and were able to find out how the virus interacts with intestinal cells in pigs,” Dr. Kuhlenschmidt says.

“We were able to take that knowledge out of the lab, synthesize a therapeutic agent, and take it back into the field to protect pigs from viral disease. So I got to see the whole process from discovery to application. That’s something that was really exciting to me.”

“Mark’s work as a research scientist, particularly in the area of infectious disease, is incredibly important,” says Dean Peter Constable. “He has contributed a lot to the understanding of the pathogenesis of infection.”

Discovery in Cell Metastasis

More recently Dr. Kuhlenschmidt has been working on a cancer metastasis project, collaborating with Professor Tahir Saif from the Department of Mechanical Science and Engineering. He says the collaborative process is highly rewarding.

“I’m thinking about genes and pathways and signals, and Tahir is thinking about physics and mechanics and forces,” Dr. Kuhlenschmidt says. “So what we were able to do together is demonstrate that the mechanical environment within which a tumor sits can be primarily involved in initiating the metastasis process. And that is a paradigm I would never have thought of on my own. When you collaborate, you find there’s a synergy that can lead to a whole new way of thinking about science and about particular problems.

“It’s exciting to be part of those teams, because each person brings something the other people don’t have. So that’s the way the funding trend is going, and society’s going to benefit from it—more discovery and treatment.”

Dr. Kuhlenschmidt’s collaboration with the mechanical engineer led to the discovery that changing the mechanical environment changed
whether the cells metastasized. “Our eyes popped open when we saw that,” he says.

The discovery led to additional funding that could potentially lead to an understanding of how to attack metastasis from a mechanical perspective as well as a biological perspective.

**A Revolutionary Curriculum**

There’s another change that Dr. Kuhlenschmidt has been part of in recent years: a revamping of the curriculum. Students now start doing clinical work in their first year, rather than their fourth. They also learn about infectious diseases in one “mammoth” 10-hour course. And even with a larger class size, the formation of eight-person small groups facilitates deeper discussions and greater understanding.

“Our curriculum may revolutionize how veterinary medicine is taught across the country,” Dr. Kuhlenschmidt says. “I’m very proud of the curriculum here.”

**Back to the Bench**

It’s the students he will miss the most in retirement, he says. He particularly enjoyed teaching the small group sessions, because “you get to impart some knowledge that you wouldn’t be able to do any other way, and I will miss that a lot.”

Dr. Kuhlenschmidt spent most of his career working closely with his wife, Theresa Banet Kuhlenschmidt. The science discussions didn’t stop at 5 p.m.; they continued into the dinner hour and many times beyond that hour. (She is retiring in December as well.)

“Our relationship allowed me to really excel in science,” Dr. Kuhlenschmidt says.

Dr. Kuhlenschmidt plans to golf—a game he has gotten “somewhat reasonable at”—and to travel to visit his sons and grandkids after he retires. But he plans to remain busy with his infectious disease and cancer cell metastasis projects as well.

“It will be somewhat like going back to the postdoc, where you live, eat, and drink science, and that’s all you do,” he says. “It’s funny, you start off your career that way, and then as a faculty member or an administrator it takes you out of the lab to some extent. So I’m looking forward at the end of my career to going back in and being a scientist again at the bench.”

**Parasites, Public Outreach, and Everything in Between**

**BY NORA MCKAY**

Dr. Allan Paul has certainly embraced all aspects of the university’s teaching-research-service mission over the course of his career at the College of Veterinary Medicine.

The list of roles he has held—most of them simultaneously—tells the story: associate dean for public engagement, professor of pathobiology, section head for parasitology in the Veterinary Diagnostic Laboratory, companion animal Extension veterinarian, and executive secretary of the college’s alumni association.

His connection to Illinois extends even further: he earned his veterinary degree from the college in 1977 and his master’s degree in 1984.

As a veterinary student, he was a research associate for Dr. Kenneth Todd, a parasitologist.

“Those four years with Dr. Todd helped me develop my interest in parasitology,” says Dr. Paul. He practiced in Chicago and Madison for four years before returning to his alma mater for graduate study and a career in academia.

Dr. Paul has studied and diagnosed the parasitic pests of dogs, cats, pigs, cattle, and horses. His main research has focused on conducting trials of new drugs to make sure they work effectively and safely for animals. For the past decade, his concentration has been on toxicity in collies to the class of deworming drugs called avermectins.

“When a new product comes out, the FDA requires it to be tested in collies since they tend to be sensitive,” said Dr. Paul. “I have done tons of collie studies over the years.”

Along with his research work, Dr. Paul also served as the associate dean of public engagement. The office’s main role is to provide continuing education programs for veterinarians and the general public and to direct University of Illinois Extension programs for animal producers and animal owners.

Dr. Lawrence Firkins, assistant dean of public engagement, has enjoyed working with Dr. Paul for over 20 years and admires his unfailing determination.

“Dr. Paul is the very definition of what it means to be a mentor,” says Dr. Firkins. “He is so good at providing guidance and encouragement while focusing on my development as a faculty member. He has consistently fostered a culture of collaboration within the Office of Public Engagement.”

Dr. Firkins also applauds Dr. Paul for being one of the most effective and favorite professors at the college, hailing him as “this generation’s Dr. Small.” Dr. Paul has won teaching awards—some of them multiple times—at the college, university, and national levels. In 2000, he received the college’s All-Around Excellence Award.

“Teaching is my favorite part of the job,” says Dr. Paul. “And it will be what I will miss the most.”

It is obvious that students will miss him as well. Displayed all over his office, Dr. Paul has various gifts given to him by past students, including Lithuanian maps, Russian dolls, and a framed valentine signed by an entire class.

Being a member of the Illinois community has been a rewarding experience for Dr. Paul, and he wishes all the best for his students and the future of the College of Veterinary Medicine.

As for his retirement plans, Dr. Paul looks forward to eventually settling in Florida where he can enjoy all the fishing and golfing he wants.
Nine Honored for Excellence

Eight members of the faculty and staff and one graduate student at the College of Veterinary Medicine received awards for service excellence in a ceremony held September 22.

Two veterinary technicians in the Veterinary Teaching Hospital were honored:
- Shari Poruba, ophthalmology, received the Shirley Seets Award for Staff Excellence for demonstrated excellence in job performance and service;
- Justin Lancaster, anesthesiology, received the Dr. Robert and Lucy Graham Award for a staff member who has made outstanding contributions.

Alan Upchurch, coordinator of audiovisual services, received the Terry and Judy Rathgeber Academic Professional Excellence Award for outstanding performance by an academic professional staff member.

Dr. Daniel Dorbandt, a resident in ophthalmology, received the Dr. Walter E. Hoffmann and Dr. Ann L. Johnson Resident Teaching Excellence Award for an outstanding graduate student or resident in training for a specialty board recognized by the American Veterinary Medical Association.

Dr. Jing Yang, comparative biosciences, received the Zoetis Animal Health Award for Research Excellence, presented to a current faculty member who shows promise of attaining or has already attained national recognition.

New Diplomates

Dr. Kelly Ballantyne, a faculty member who practices at the college’s Chicago-based clinic Veterinary Behavior at Illinois, passed the certification examination to become a Diplomate of the American College of Veterinary Behaviorists.

Dr. Jason Pieper, veterinary clinical medicine, passed the American College of Veterinary Dermatology certification examination.

Dr. Karie Vander Werf, former resident in large animal emergency and critical care, passed the certification examination for the American College of Veterinary Emergency and Critical.

Dr. Gordon and Mrs. Helen Kruger Excellence Awards in four categories are given to college faculty members each year. The 2015 winners were:
- Anne Barger, pathobiology, received the teaching award in recognition of an instructor who presents material with enthusiasm, dedication, clarity, and creativity.
- Laura Garrett, veterinary clinical medicine, received the service award for outstanding committee work, clinical service and continuing education.
- CheMyong “Jay” Ko, comparative biosciences, received the research award in recognition of quality and quantity of publications, research awards, and outside recognition of the nominee’s work.
- Jodi Flaws, comparative biosciences, received the all-around excellence award, presented to a faculty member who demonstrates excellence in teaching, research, and service.

Congratulations to pathology residents Ian Sprandel, Daniel Woodburn, Wade Edwards, and Lisa Schlein, who all passed phase I of the American College of Veterinary Pathologist certifying examination in March.

Dr. John Herrmann, veterinary clinical medicine, was selected by graduating seniors at the University of Illinois at Chicago to receive the Silver Circle teaching award.

Dr. Carol Maddox, pathobiology, received the Biomic Inc. Award for Excellence in Diagnostic Veterinary Microbiology. She received the award at the American Association of Veterinary Laboratory Diagnosticians annual meeting in October.

Dr. Alison Morgera, former equine medicine and surgery intern, received the award for the best abstract submitted by a large animal resident at the International Veterinary Emergency and Critical Care Meeting. The award is sponsored by Mila International. Dr. Morgera completed her research project with Dr. Pamela Wilkins, veterinary clinical medicine.
Dr. Ashley Mitek, anesthesia resident, took first place in the abstract competition among small animal residents at the American College of Veterinary Anesthesia and Analgesia meeting for her research entitled “Development and standardization of internal tracheal diameter cervical vertebral length ratios in Dachshunds, Beagles, Labrador Retrievers, Yorkshire Terriers, Boxers, and Pugs.”

Holly Rushakoff, associate director of marketing, completed a yearlong leadership development program called Leading Forward, offered through the Office of the Vice Chancellor for Institutional Advancement.

C.W. “Bill” Smith, DVM, MS, DACVS, emeritus professor of small animal surgery, was recently recognized by the “Honor a Mentor” program of the American College of Veterinary Surgeons. Eight surgeons who trained at Illinois under Dr. Smith contributed to this honor: Drs. Scott Averill, Robert Bertoy, Bradley R. Coolman, Joseph Harari, Simon Roe, Kristi Sandman, Kevin Winkler, and Susan Seitz-Streeter.

Dr. Smith remarked: “Mentoring begins with developing a relationship that is based on a caring attitude, mutual respect, always being available, giving encouragement, providing an atmosphere for learning, and challenging them to develop good surgical skills and judgment.”

In November, the Illinois welfare judging team placed fifth in the overall veterinary student team scoring at the AVMA Intercollegiate Animal Welfare Judging/Assessment Contest. Melchi placed first in the individual scoring. Shown above are: back, from left: Coach Dr. Jennifer Burton with students Mandy Erdei, Lynsee Melchi, and Rosalie Ierardi; front, from left: Hilary Antosh, Ruth Sheppard, and Michelle Golz.

Nicole Bell, Class of 2016, won first place in the American Association of Equine Practitioners student case report competition for her poster entitled “Headshaking and Temporomandibular Osteoarthropathy in a Quarter Horse Gelding.”

Nicole Sidebotham, Class of 2019, was awarded a Morris Animal Foundation Veterinary Student Scholar fellowship in support of a summer research project entitled “Biochemical differences between metastatic and non-metastatic canine osteosarcoma.” She is working in the laboratory of Dr. Aditi Das, comparative biosciences, in collaboration with Dr. Tim Fan, veterinary clinical medicine.
Open House: A Hands-on Happening

The annual Vet Med Open House on October 4, 2015, held many opportunities for young and old visitors to get in touch with the wide range of animals and disciplines involved in the veterinary field.

A new feature brought alumni (from left) Drs. Arielle Herndobler, Doreen Turner, Lynn White-Shim, Michael Miller, and Joseph Rudolphi together in a panel for prospective students to showcase the variety of practice opportunities. They answered questions from prospective veterinarians and their parents.

Mark your calendar for the next Open House on Sunday, October 2, 2016! If you’d like an active role in this year’s event, please contact Mindy Spencer, associate director of alumni relations and special events, at mindys@illinois.edu.
As alumni, no matter the year we graduated, many of us share experiences that we can instantly connect over: faculty members who were tough and pushed us to do our best, extracurricular activities that were fun but also allowed us to expand our horizons beyond the classroom, cases that challenged and, in some cases, changed us, and classmates who became lifelong friends.

In my role as VMAA President, I have the pleasure of speaking to alumni at events. No matter the graduation year, I consistently hear the same things from alumni—pride in our degrees, the feeling that veterinary medicine has been a rewarding and fulfilling career, and thankfulness for our time at the University of Illinois. We are proud to call ourselves Illini.

It is that pride and gratitude that drives so many of our alumni, including me, to hire Illinois grads, to volunteer to serve when possible, and to give back charitably. My time at the University of Illinois made a positive and lasting impact upon my life—as an alumnus, I feel it is now my turn to make a lasting impact upon our alma mater.

Why does the college need our support? Many of us can recall a time when tuition was affordable; however, due to ever-dwindling state support, today’s students are graduating with an average debt load of $140,000. This not only limits their choices after graduation, but it also means that some of the best and brightest students out there are not applying because they cannot afford to attend.

Your financial support allows the college to not only attract top students but also provide, once those students are here, an innovative curriculum and educational experience that is second to none.

I, along with my fellow VMAA board members, ask that you too support our alma mater. To find out how, visit http://go.illinois.edu/supportcvm. Thank you in advance for your generosity.

Sincerely,

William L. Augustine, DVM
President, Veterinary Medical Alumni Association

Alumni and College Honor Five

The University of Illinois College of Veterinary Medicine and its alumni association presented four Dr. Erwin Small Distinguished Alumni Awards and a Special Service Award on September 17 during the college’s annual Fall Conference for Veterinarians.

The Dr. Erwin Small Distinguished Alumni Award recognizes distinguished graduates who have made significant contributions to the veterinary profession or the college. It was created in honor of professor and associate dean of the Illinois veterinary college, Dr. Erwin Small, who dedicated his entire career to the veterinary profession as professor and associate dean of the University of Illinois College of Veterinary Medicine.

- **Wayne Anderson**, Class of 1979, has grown the Glendale, Ariz., clinic he founded in 1984 with classmate Dr. Jim Prater into a cooperative of 20 privately owned veterinary clinics, branded as AzPetVet. This cooperative—with 80 veterinarians, the largest private employers of veterinarians in Arizona—provides mentoring, continuing education, and a pathway to practice ownership for veterinarians. Dr. Anderson has held every office in the Arizona Veterinary Medical Association, demonstrating exceptional leadership in legislative relations and fundraising. He has also donated his time and financial support to the county animal care and control office as well as to an organization dedicated to helping at-risk youth through pet therapy.

- **Maureen Birmingham**, Class of 1983, currently serves as representative of the World Health Organization and Pan American Health Organization in Argentina. Her career exemplifies the global health impact of the veterinary profession. She has worked in Haiti and Bolivia to help subsistence farmers, in Africa as part of the Epidemic Intelligence Service of the Centers for Disease Control and Prevention, for the World Health Organization in Switzerland on polio eradication, in Thailand on emerging diseases and as the WHO representative, and in Mexico, overseeing the WHO/Pan American Health Organization office and addressing a wide range of public health issues, from childhood obesity to addiction.
It’s Not Too Late to Nominate

Outstanding Young Alumni Award Debuts in September

With more than 5,000 living DVM, PhD, and MS degree graduates, Illinois has a lot of outstanding alumni! Nearly one-fourth of our alumni have graduated within the past 10 years, and we know that these newer alumni are making tremendous contributions in their fields. The Veterinary Medical Alumni Association has introduced a new way to recognize the achievements of our recent graduates: the Outstanding Young Alumni Award.

Help us identify the inaugural winners of this award by submitting a nomination online. We are seeking Illinois nominees from the Class of 2006 or later who have excelled in their field and who embody the Illini spirit of “labor and learning,” through creativity and entrepreneurship in the field of veterinary medicine, regardless of where they reside.

The presentation of the award, along with the Dr. Erwin Small Distinguished Alumni and Special Service Awards, will take place in Champaign during the Fall Conference luncheon on September 22.

More information is available at vetmed.illinois.edu/alumni/.
**IMPORTANT DATES**

**August**

8  American Veterinary Medical Association Annual Convention Alumni Reception, San Antonio, Texas

**September**

22–23  Fall Conference for Veterinarians, Champaign, Ill.

23  Class Reunion Kickoff at Papa Del’s Pizza, Champaign, Ill.

**October**

2  Vet Med Open House, Urbana, Ill.

15  Veterinary Medical Alumni Association Golf Outing, Chicago area (details coming soon)


28  Milestone Reunion for those Celebrating 40th to 60th Reunions, Urbana, Ill.

29  Homecoming Tent Party and Football Game vs. Minnesota Gophers, Champaign, Ill.

**November**

4  Alumni and Friends Reception at the Illinois State Veterinary Medical Association Convention, Lombard, Ill.

15–16  Illini Days in Chicago

**December**

5  Alumni and Friends Reception at the joint meeting of the American College of Veterinary Pathologists and the American Society for Veterinary Clinical Pathology, New Orleans, La.

5  Alumni and Friends Reception at the American Association of Equine Practitioners National Meeting, Orlando, Fla.

**February 2017**

7  Alumni and Friends Reception at the North American Veterinary Conference, Orlando, Fla.

**March 2016**

6  Alumni and Friends Reception at the Western Veterinary Conference, Las Vegas, Nev.
WE’RE PUTTING PIZZAZZ AND PIZZA IN FALL CONFERENCE

SEPT. 22–23 GO.ILLINOIS.EDU/FALLCONFERENCE

A live rock band? An appearance by the Marching Illini Drumline? A party at Papa Del’s Pizza?

This is not your father’s Fall Conference. continued on page 21