Penn Vet’s 125 Years
Exceptional People Doing Extraordinary Things
features

10 IMPACT OF DONORS THROUGH THE YEARS
11 ADVANCES IN EQUINE VETERINARY MEDICINE
22 SCHOOL HIGHLIGHTS

departments

5 DEANS’ MESSAGES
14 MEMORABLE FACULTY
24 COMMENCEMENT THEN & NOW
30 ALUMNI MEMORIES
32 FACULTY & STAFF NEWS
34 CLASS NOTES

about the cover:
Dean Joan Hendricks joins Penn Vet faculty and staff on the Deubler Bridge for Women in Veterinary Medicine, which connects the Vet Quadrangle, our oldest building, with the Vernon and Shirley Hill Pavilion, our newest building. Find out who they are and what they have to say about Penn Vet on pages 6 through 8. Photo by Lisa Godfrey.
125 Years of Innovation, Discovery and Service

I am delighted to congratulate Penn Vet on its 125th anniversary and to join in celebrating the occasion with its faculty, staff and students. Since 1884 the school’s commitment to improving the lives of animals and people has been a model not only for other veterinary schools but also for the Penn community itself. It is a strong partner in our world-changing enterprise.

The words of Dr. William Pepper, the university’s provost and himself a descendant of Benjamin Franklin, ring as true today as they did when he urged the university to establish a Department of Veterinary Medicine: “One of the characteristic features of the present age, springing from its vigorous humanizing spirit, is the large share of attention that is paid to improving the condition of the lower animals… and it is desirable that careful study be given to the best means of promoting their health and comfort.” The “vigorous humanizing spirit” flourishes more than ever today at one of the world’s best schools of veterinary medicine.

From its origins as an extension of the medical school with 13 teachers, 29 students and one building, Penn Vet has grown into the standard-bearer for excellence in scientific research and veterinary care and education, with two campuses spread over 35 miles and more than 6,000 graduates. The multidisciplinary Penn Institute for Regenerative Medicine, established in 2007, will advance knowledge in stem cell biology and regeneration and translate these discoveries into new, previously unimaginable therapies to alleviate suffering and disease. Through both its pioneering research and the sterling quality of its graduates, Penn Vet will continue to have an ever greater impact on the world’s health.

I salute Penn Vet, for 125 years of innovation, discovery and service, and I look forward to its future achievements.

—AMY GUTMANN
PRESIDENT OF THE UNIVERSITY OF PENNSYLVANIA
Penn Vet Deans Honor the Past, Plan for the Future

From its origins in the crucible of American medicine in 1884, into the first decade of the twenty-first century, Penn’s School of Veterinary Medicine has shaped and advanced the education and practice of the profession. Established when the U.S. economy was still largely agricultural, the school’s founders—citing the fundamental similarities between disease processes in humans and animals—believed the new veterinary school would serve agriculture best by developing as a science-based branch of medicine. Eventually the One Medicine concept would become the school’s guiding principle and proudest legacy.

The promise of the early years was difficult to realize. Located in Philadelphia in a private university, the veterinary school had scant access to Commonwealth funding and was scarcely visible to Pennsylvania’s agricultural constituency until Dr. Leonard Pearson became the school’s third dean in 1897. A visionary leader and scholar, Dr. Pearson reached out to the Commonwealth and to agricultural groups and individuals while planning and raising funds for the architecturally significant Quadrangle building. Following Pearson’s death in 1909, the school, seemingly forgotten by the university and losing touch with its rural constituency, entered a “holding on” period; little money existed for faculty growth and development, research or improved facilities. Nonetheless, the school continued to produce many graduates who would make major contributions to the profession and society.

In 1953, soon after becoming the school’s eighth dean, and after assessing its dire circumstances, Dr. Mark Allam asked a group of senior faculty to vote on whether he should recommend phasing out the school. The unanimous response, an expression of confidence in the new dean, was an unambiguous resolve to continue and, moreover, to strive for nothing less than preeminence by exploiting the advantages afforded by immediate access to Philadelphia’s superb biomedical community. The recent acquisition of a fine rural campus (New Bolton Center) for food-animal and equine teaching and research provided additional grounds for faculty optimism.

What followed, at a breathtaking tempo, can best be described as a renaissance. Indeed, Penn Veterinary Medicine had entered a golden age. Energized by the dean’s vision and ability to persuade the school’s public and private constituencies to support its programs, an inspired faculty, led by powerful department chairs, seized the extraordinary opportunities presented by location and by the unprecedented availability of federal grants for research, training and construction. The world soon became a recruiting ground for faculty and trainees anxious to participate in Penn’s grand experiment to transform veterinary education and practice.

Today, inspired by the recently opened Vernon and Shirley Hill Pavilion for teaching and research, and having entered the new century so triumphantly, the modern faculty’s spirit of innovation, boundary crossing and openness to risk will continue to propel the school forward as it celebrates its 125th birthday.

—ROBERT MARSHAK, DVM
DEAN EMERITUS
What will Penn Vet—and the profession—look like during the next 125 years? Certainly different! Look at the pace of change in the last century—societal change, technological change, biomedical change. The challenge to us—individually and collectively, whether we care for animals professionally or personally, as individuals or as groups—is to be working today to maximize the health of animals in the future as well as the present.

How will we at Penn Vet invent the best and brightest future for the world’s animals? Looking into my crystal ball, I predict we will change ourselves and the profession—again.

I predict that we will bring veterinary medicine’s contribution to society at large. We will set the gold standard for veterinary involvement in disease prevention and surveillance through population-based medicine. This includes not only ensuring the health, welfare and productivity of herds and flocks of farm animals, but also ensuring the well-being of animals in biomedical research colonies and animal shelters. Veterinary medicine fosters better animal health and healthier human populations, and we will develop the most cost-effective health care—prevention of disease! Penn Vet’s traditional role in leading “One Medicine” will be expanded to lead the way in “One Health”—the emerging concept that animals and humans are part of one ecosystem at risk. Healthy humans require healthy animals, both domestic and wild—and these all require and contribute to environmental health.

Penn Vet will train our students to impact the health of living things globally. We will use international programs and Web-based training, we will add knowledge of trade and epidemiology to the conventional core competencies. With this training, our graduates will show that veterinarians can serve as the front-line in detecting and preventing disease—a “veterinary reserve corps” in the fight for health.

I predict that we will manage the high costs of veterinary care and veterinary training. Penn Vet will pioneer economical methods of care and training. Optimal use of new technologies as well as innovative cost-effective processes will allow us to demonstrate the benefits of veterinary training and services to the economy and public health. This will demonstrate to donors, public health foundations and the government that it is a wise investment to adequately fund veterinary training and care. We will pioneer in cost-effective practices, implementing innovative processes, including fiscal accountability in all aspects of training, research and patient care. Evidence-based publications on these practices will pave the way for others to follow our lead.

I predict that we will uniquely lead in educating veterinarians and pioneering in clinical care. Penn Vet will add value to professional and post-graduate training by fostering joint programs with other leading schools at Penn—and beyond. These programs will equip veterinarians to be squarely in the lead in addressing complex, controversial societal issues regarding the place of animals in society and the optimal means of translating basic research into real-world impact on health.

I predict that we will foster new models for community veterinary service. Penn Vet’s programs will set the standard for volunteerism in an urban setting, building on our existing volunteer programs in local schools and beyond. We will work with urban horses and with shelter animals. We are leading the way by partnering with the City of Philadelphia on the inclusion of pets in emergency preparedness planning and developing new models of pet therapy with partners such as Penn Nursing and its Living Independently for the Elderly (LIFE) program, which helps maintain independent living for local needy elderly residents. We will partner with other governmental agencies, veterinary organizations, peer veterinary schools and humane organizations to make a real-world difference for animals and their owners.

As Dean Marshak reflects on Penn Vet’s first 125 years, he notes our ups and downs and the renaissance that brought Penn Vet to our international leadership in health care. We are, again, in a time of challenging and unprecedented trial and change.

We will need your help—friends, alumni, parents, colleagues—to keep us informed about what you are seeing and doing, and to help us continue to transform veterinary education, practice and research.

—JOAN C. HENDRICKS, V’79, GR’80 THE GILBERT S. KAHN DEAN OF VETERINARY MEDICINE


About the Cover

The cover on this issue features an assemblage of Penn Vet employees and students. Through all the important work we do on two very different campuses—teaching students, conducting research and caring for animals at our hospitals—it is the people that make the school what it is. We gathered together a cross-section of the school—including students and staff, nurses and clinicians, teachers and administrators—and photographed them on the Deubler Bridge for Women in Veterinary Medicine, named after Josephine M. Deubler, V’38, the school’s first woman graduate. The bridge links the new Vernon and Shirley Hill Pavilion with the school’s Quadrangle Building, constructed in 1913.

We asked our cover participants the following question: “What significant changes have you seen or do you hope to see at Penn Vet?”

1) Dr. Joan C. Hendricks, Gilbert S. Kahn Dean of Veterinary Medicine
2) Ashra Markowitz, assistant dean for student affairs
3) Linda Schwartz, clinical receptionist, Ryan Veterinary Hospital
4) Dr. Hannah Galantino-Homer, senior research investigator in laminitis
5) Kirk Breuninger, third-year student; president, Class of 2010
6) Dr. Mark Oyama, associate professor, cardiology
7) Dr. Mark Haskins, professor, pathology and medical genetics, head of the laboratory of pathology and toxicology
8) Dr. Ray Sweeney, professor and chief of medicine, New Bolton Center
9) Derek Fong, fourth-year student
10) Dr. Gus Aguirre, professor, medical genetics and ophthalmology
11) Sly Broxton, parking attendant, Ryan Veterinary Hospital
12) Dr. Cindy Otto, associate professor, critical care
13) Ashley Lester, nurse, Widener Hospital
14) Monika Wright, nurse, ICU, Ryan Veterinary Hospital
15) Dr. Jeleen Briscoe, assistant professor, special species

Photo by Lisa Godfrey.
1) Joan C. Hendricks, V’79, GR’80

**Gilbert S. Kahn Dean of Veterinary Medicine**

I saw the clinician-educator track created in the early 1980s, which has enhanced our teaching and clinical expertise phenomenally. In 1981 I was here to witness the construction of our new small-animal hospital (originally named the Veterinary Hospital of the University of Pennsylvania, then renamed for the late state senator Matthew J. Ryan), as well as our new research and teaching building, the Vernon and Shirley Hill Pavilion, in 2006. There has been much-enhanced research training for VMD students and VMD-PhD students, substantially better care for animals at both hospitals, a great willingness by all to work together to achieve the school’s missions and increased public service by students and others.

In the years to come, I would like to see more of the above: more new buildings and improved facilities for animal patients, teaching and research—especially at New Bolton Center. I hope we can keep improving how we teach vet students, care for patients, use farm and lab animals and train researchers to prevent and treat animal diseases. I would also like to see more outreach and more influence by veterinarians in the public sector and more leadership and public impact by veterinarians—especially those trained at Penn Vet! And finally, I hope we can accomplish an even greater integration of our training and expertise into the university’s programs and the city’s and commonwealth’s decision-making groups.

2) Ashra Pearl Markowitz

**Assistant Dean for Student Affairs**

It was 1970 when I began working as a secretary at Penn Vet. My life’s dream was to be a veterinarian, but in 1970 female veterinarians were mostly an unknown species! The changes to the veterinary profession over the last 38 years have been breathtaking. Not only do women play an integral and important role today, but the profession itself has evolved to incorporate countless areas including public health, biosecurity and agro-terrorism; indeed, veterinarians keep our pets healthy, our food supply safe and our country protected.

3) Linda Schwartz

**Clinical Receptionist, Ryan Veterinary Hospital**

One of the most exciting themes of the veterinary school and hospitals is the continuing application of the most sophisticated cutting-edge medicine, gene therapy, radiation therapy, acupuncture and many other therapies to support and maintain the small-animal patient. Even during this time of economic and emotional turmoil, the concern and recognition of the importance of the relationship of human beings to their pets is never minimized.

4) Hannah Galantino-Homer, V’93, GR’00

**Senior Research Investigator in Laminitis**

Funding the laminitis research program has been a huge step forward for the school. . . . Since starting the laminitis basic research program last year, I have been thrilled and grateful to receive financial support and multiple opportunities for collaboration within Penn Vet as well as a platform for intellectual exchange and collaboration with laminitis researchers from other institutions. My hope for the future is to be able to translate this excellent opportunity into a full-fledged research program with significant extramural support.

5) Kirk Breuninger, V’10

The most significant change I’ve seen has been the appointment of SCAVMA (Student Chapter of the American Veterinary Medical Association) as the overarching governing body of the students. This has allowed for a direct dialogue between the student body and the administration and faculty, which has increased communication and cooperation to better student life and the future of the school. The long-term future change I’d like to see is a remodeling of the curriculum so that students have more hands-on learning in clinical settings and less time in lecture halls.

6) Mark Oyama, DVM

**Associate Professor, Cardiology**

I would love to see Penn Vet expand its outreach into the Philadelphia community, targeting urban elementary school-aged children to introduce them to veterinary medicine.

7) Mark Haskins, V’69, GR’79

**Professor, Pathology and Medical Genetics, Head of the Laboratory of Pathology and Toxicology**

In my 34 years on the faculty, the most obvious and significant changes have been the construction of two new buildings on the Philadelphia campus, a dramatic growth in the clinical faculty, administration and staff and the increase in class size.

8) Raymond W. Sweeney, V’82

**Professor and Chief of Medicine, New Bolton Center**

When I was a veterinary student in 1978, what is now the Matthew J. Ryan Veterinary Hospital was a giant hole in the ground. We watched it grow as our veterinary education progressed, and we occupied the brand new state-of-the-art hospital midway through my fourth year. Similarly, the Hill Pavilion has revitalized the educational facilities on the Philadelphia campus. The NICU/ICU and the Scott Sports Medicine building at New Bolton Center are two examples of important projects that have
helped provide the resources for great people to reach their full potential. While our faculty, staff and students are the heart of our operation, the bricks and mortar provide the all-important spine. For the future, I look forward someday to seeing the much-needed upgrade of facilities at New Bolton Center completed!

9) Derek Fong, V’09
I have been impressed with Penn Vet's new emphasis on public health and global issues, such as the support of the One World One Health initiative and the World Leadership Awards. I hope that Penn Vet will play an integral part in transforming the One World One Health initiative from concept into concrete actions. We are all citizens of humanity, and globalization only increases our interconnectedness with each passing day.

10) Gus Aguirre, C’66, V’68, GR’75
Professor, Medical Genetics and Ophthalmology
I see Penn Vet as a great working environment—collegial, progressive and supportive—with excellent leadership, which keeps improving the positive direction of the school. There is also wonderful mentoring and support for junior faculty to ensure their success.

11) Sly Broxton
Parking Attendant, Ryan Veterinary Hospital
I would like to see better parking facilities at the Ryan Veterinary Hospital. Parking is always at a premium for our clients; a leveled garage would be ideal. Otherwise, I’m the happiest person on the planet!

12) Cindy Otto, DVM
Associate Professor, Critical Care
There are two major changes I have witnessed and have been proud to be a part of. The first is the growth of the world-class emergency and critical care group. When I first came to Penn Vet, veterinary emergency and critical care was a new specialty, and personnel changes here had resulted in the reinvention of the program (under the leadership of Dr. Joan Hendricks). It is now recognized worldwide as the premier center for all aspects of emergency and critical care—including patient care, student training, advanced clinical training and clinical research. The second major frontier in which Penn Vet is leading the way is in clinical trials in animals. The organization of the Veterinary Clinical Investigation Center (again led initially by Dr. Hendricks) has allowed clients to participate with their animals in the investigation of novel therapies to benefit animals and potentially humans. This visionary approach has the ability to create new knowledge for veterinary patients, improve the care of patients and advance medical understanding for all species—truly an embodiment of “One Medicine.”

13) Ashley Lester
Nurse, Widener Hospital
The change I would like to see would benefit the future vet students. As a nurse, I interact with the students quite frequently. One of their major concerns is their personal financial situations. By the time they get out of vet school, they are over $100,000 in debt. In light of the current economy, and seeing that more and more students are unable to obtain student loans, I would hope that Penn would act to assist those who want to pursue a career they love.

14) Monika Wright
Nurse, ICU, Ryan Veterinary Hospital
In the few years that I have been an ICU nurse at the Ryan Veterinary Hospital, I have seen a yearly increase in our patient caseload. People view their pets as family members and have become more dedicated to their health care. They are willing to spend the money to treat their critically ill pets. My hope is to see an expansion and renovation of our ICU to accommodate these patients.

15) Jeleen Briscoe, V’02
Assistant Professor, Special Species
This year marks my tenth year at Penn Vet, and I have to say the most remarkable change to me is what technology has done to this school. I am course organizer for two courses and heavily utilize the on-line course Web site to administer quizzes and mandatory course evaluations, interact with the students on real-time Web chats and post important notices, images and even videos. When I was a student just a few years ago, there were many of us who weren’t even on e-mail, so this advance has really changed educational opportunities for students. Yes, it makes being an educator more demanding, but also more exciting because of the opportunity technology has given us to expand active-learning opportunities for our students.
Imagine a world where veterinarians can...

cure laminitis...

stop avian flu...

conquer cancer in dogs...

We are closer than you think.

Penn Vet’s Making History campaign celebrates 125 years of dedicated service to animal health. The campaign offers those who care about animals an opportunity to make a lasting difference in ensuring that Penn Vet offers the finest care, education and research in veterinary medicine.

From scholarship support for students, to rebuilding both the Widener and Ryan hospitals, to advancing animal care, the Making History campaign is for all of us.

Learn more about how you can participate at www.vet.upenn.edu
The words of University of Pennsylvania’s founder, Benjamin Franklin, resound in the actions of thousands of donors to the School of Veterinary Medicine. Over the school’s 125 years, tens of thousands of people, companies and organizations have given to support veterinary medicine at Penn and animal medicine as a whole has been changed forever.

The School of Veterinary Medicine has been built and sustained in great part through the generosity of its friends. Among the first was a great Philadelphian, Joshua Bertram Lippincott, who served on the first board of advisors and often balanced the school’s budget by writing the checks to fill in the gaps. When the school was formed, Lippincott—also an early supporter of the PSPCA—told his fellow university trustees that he was contributing $10,000 (approximately $212,340 in 2007 dollars) to the endowment fund specifically for the “purpose of establishing a Veterinary Department under the control of the University of Pennsylvania.” Other great families who have significantly helped the school over the years include the Connellys, Morans and Duponts.

Many who have followed Franklin’s advice to choose “an investment in knowledge” have come from the school’s more than 6,000 alumni. Gifts date back to the early 1900s. One such alumnus was the late Alfonzo Edmiston, V’67. Edmiston celebrated his 20th reunion by establishing an endowment to help minority students purchase textbooks. Edmiston, a graduate of Lincoln University, went west after graduation to be a small animal practitioner in California. As a final commitment to help the next generation of veterinarians, he left funding for an endowed scholarship in his estate.

Literally thousands of alumni have contributed over the years. A number have made it a regular habit. Thirty-two Penn Vet alumni have made a gift every year, without fail, since 1983—25 years of support. [See http://www.vet.upenn.edu/Alumni/FeaturedPennVetAlumni for a full list of Penn Vet’s most consistent alumni donors.]

Faculty and staff have given beyond their professional expertise as well. In addition to such stalwarts as Dr. Charles Raker (see page 14) an example is Dr. David Detweiler C’41, V’42, G’49. Veterinarians know Detweiler for establishing veterinary cardiology, being an outstanding scholar, clinician and teacher. A donor during his tenure on Impact of Donors through the Years

BY KATE JUDGE

"An investment in knowledge always pays the best interest."

~ Benjamin Franklin
Finally, those who have helped build Penn Vet have often come from those whose animals were cared for at Penn or by Penn Vet alumni. In the school’s history several names stand out: Gladys and Alfred Rosenthal whose names grace several Penn Vet buildings in Philadelphia; Vernon and Shirley Hill whose generosity and vision made possible the school’s state-of-the-art research and teaching building, the Vernon and Shirley Hill Pavilion; Isabel Robson whose long career in breeding and love of horses inspired her to give Penn Vet the largest gift in its history to advance the science and treatment of horses and dogs.

Truly the work of building and sustaining a great institution is never done. As we celebrate Penn Vet’s 125th anniversary and its international reputation for excellence for educational leadership and extraordinary animal care, we salute and thank the donors whose support makes Penn Vet a reality every day.

**BenefitsofanEstateIntention:**
- Establishes a lasting legacy
- Enables you to make a significant contribution that may otherwise not have been possible during your lifetime
- The value of the estate intention is removed from your taxable estate
- When set up as a percentage, an estate intention allows for changes in the value of your assets
- Your bequest will help transform Penn Vet’s future

If you have already included Penn Veterinary Medicine as part of your estate plan, thank you. If you would like information on ways to do so, please contact Lynn Lierardi at 800.223.8236 or lierardi@upenn.edu or visit www.upenn.planyourlegacy.org.

Your gift qualifies you for membership in the Veterinary Heritage Circle and the Harrison Society.
**Veterinary History**

**Advances in Equine Veterinary Medicine**

**BY JANE SIMONE**

Veterinary medicine’s history is fascinating. And equine veterinary medicine especially so, since the horse was key to humankind’s advancement. As English poet Ronald Duncan eloquently put it, “Our past has been borne on his back. All our history is his industry. We are his heirs, he our inheritance.”

The horse allowed transport to evolve; he carried warriors into battle, pulled produce-laden barges along canals, hauled coal from mines to heat homes and fuel industry, ploughed fields and carried mail. And of course, he ran races and chased the fox and brought excitement, beauty and a very special human-animal bond into being.

As critical as horses have been through the millennia to human beings, for centuries equine medical care, treatment and therapy chiefly lurked in an abyss of ignorance. There were occasional enlightened voices, but they were few and far between. In the fifth century BC, the Greek general Xenophon admonished, “Never act with anger toward a horse,” advice as wise now as it was then.

Xenophon knew how important the horse’s foot was to its welfare and that clean stabling and good pasture helped keep a horse healthy. The same is true today, but after centuries of treatments and remedies that ranged from the most appalling cruelty to ridiculous wishful thinking (with a few lucky breaks in between) today’s equine veterinary medicine offers sophisticated diagnostics, safe, successful surgical techniques and drugs and anesthesia that bring relief and recovery.

Looking back over Penn Vet’s 125-year history is like opening a time-capsule on equine veterinary medicine. On September 1, 1885, the Veterinary Hospital (including a farriershop) then located on Pine Street, began receiving patients — primarily horses. This was just 20 years after the end of the American Civil War, a conflict that threw into sharp relief the dire need for improved medical treatment of horses. It is estimated that approximately 1.5 million horses (cavalry mounts and animals that pulled supply wagons, field ambulances, artillery, etc.) died during the war, an appalling loss.

Penn Vet’s primary focus would be on horses and food-and-fiber animals during its first half-century of existence, but it was only after New Bolton Center opened in 1952 that the school made significant advances in equine veterinary medicine.

But Penn’s reputation as a place where rigorous intellectual curiosity was encouraged resulted in a fortuitous gathering of some of the most outstanding veterinary minds of the time. The collective intellects of Penn Vet clinicians such as Dr. Mark Allam, Dr. Charles Raker, Dr. Jacques Jenny, Dr. David Nunamaker and others too numerous to mention created a climate of enthusiasm to meet challenges in equine surgery and medicine shunned until then. In addition, the role of the horse in every day life had changed dramatically. Once predominantly indispensable work animals, horses became partners in a variety of elite equestrian sports, as well as fox-hunting and pleasure riding. Owners were willing to support and encourage improved veterinary care for their horses as well as research into their afflictions.

For the horse, there have always been two great enemies of good health: foot and leg soundness and gastro-intestinal problems. Horse owners rightly fear a diagnosis of laminitis or colic. Surgery of any sort carried tremendous risk. Dr. Charles Raker, professor emeritus, recalled that nearly 80 per cent of colic surgery patients died in the early days of those procedures.

In more than 50 years of work at New Bolton Center, that statistic has changed dramatically. Today, more than 80 per cent of horses having colic surgery that are recovered from general anesthesia survive — a complete reversal from the early days.

The creation of a Section for Emergency, Critical Care and Anesthesia at New Bolton Center has led to research projects that are investigating certain growth factors (proteins) important to the healing of all body tissues. Dr. Louise Southwood states that these proteins may have a critical role in helping enhance intestinal healing in horses with severe GI injury. Her initial research results are encouraging. The ultimate objective is to use gene therapy to deliver these growth factors to colic patients’ intestines to help healing. Another study is looking at the survival and complication rates of geriatric horses with colic, particularly those having surgery, compared with non-geriatric (mature) horses and again, initial findings are very encouraging.

The rigid endoscope, developed by Dr. Frank Kral in the early 1950s, and its 1970s replacement, the flexible endoscope, significantly improved equine upper respiratory
evaluations. In conjunction with New Bolton Center’s high-speed treadmill these tools revolutionized the diagnosing and treatment of the equine airway.

**Dr. David Nunamaker**, who recently retired from New Bolton Center’s faculty as the Jacques Jenny Professor of Orthopaedic Surgery, tirelessly pursued greater understanding of the mechanics of bone modeling and remodeling in horses, based on various types of exercise surfaces, and designed a now widely used external fixation device for horses suffering catastrophic leg fractures. In the Richard S. Reynolds Comparative Orthopaedic Research Laboratory, Nunamaker conducted in-depth research into many conditions affecting Thoroughbred and Standardbred race horses, such as bucked shins, fatigue fractures and bone and fracture treatments. His work offered the racing industry enlightened alternatives to traditional training methods that would benefit the horse.

Arthroscopic surgery (led by **Dr. Dean W. Richardson**, chief of New Bolton Center’s Section of Surgery), laser surgery (pioneered by the late **Dr. Eric Tulleners** and evolving under **Dr. Eric Parente**’s leadership) and highly sophisticated imaging modalities (digital radiology, MRI, nuclear scintigraphy, ultrasound) are critical factors in diagnosing and treating today’s horse. Cardiology as an equine specialty has reached undreamed of levels of accuracy and sophistication under the guidance and expertise of **Dr. Virginia Reef**.

In the forefront of New Bolton Center’s services and work is its excellence in treating orthopaedic patients. **Dr. Jacques Jenny**, a noted Swiss orthopedic surgeon defied convention in the 1950s and 1960s by attempting to repair fractures in horses’ legs. Jenny’s pioneering work on equine joint surgery went well, but post-operative recovery often led to the horse panicking as it emerged from anesthesia, either re-injuring the damaged leg or breaking a different limb. Jenny’s frustration over these failures inspired him to conceptualize an anesthesia recovery method that has proved a tremendous boon to patient and surgeon alike. He developed the famous “pool recovery system,” which to this day, according to Richardson, gives surgeons the confidence to attempt the most difficult types of orthopaedic repairs — repairs that would have been unheard of 40 or 50 years ago.

Horses are awoken from anesthesia in a specially designed and constructed rubber raft in a large, heated pool that allows them to kick freely without risk of injury. Once fully awake, the patient is lifted from the raft and pool secure in a sling and allowed to stand up calmly, or is transported by monorail to the Widener Hospital’s Intensive Care Unit to the safety of a well-bedded stall. One of only four such recovery systems in the US, the pool at New Bolton Center remains unique in its scope and is a dramatic illustration of how far equine veterinary medicine has come since the days when horses were routinely euthanized for catastrophic (and not so catastrophic) orthopaedic injuries.

These surgical triumphs would have been impossible without advances in large animal general anesthesia. Anesthesia for large animal patients had been used, but it was fraught with danger. Both the drugs and equipment used contributed to those dangers, but in the late 1950s and early 1960s, spurred on by educational and research opportunities offered through Penn Vet’s close proximity to Penn’s School of Medicine, the veterinary school made great progress in both small and large animal anesthesiology.

Significant pioneers of successful equine anesthesia are New Bolton Center’s **Dr. Lawrence Soma** and **Dr. Lin Klein**, whose work in this field has led to remarkable achievements. Soma highlighted the introduction of improved inhalational anesthesia as the “great leap forward” that increased positive outcomes for equine surgery. Before this, local anesthesia, sedatives, ether and intravenous medications provided insufficient muscle relaxation and analgesic relief (not to mention, in the case of ether, danger to patient and clinician alike); the ability to deliver anesthesia safely and in adequate quantities through inhalation to ensure adequate muscle relaxation and pain-free procedures significantly enhanced the chances of a favorable outcome for the patient.

But with these advances came the need for improved anesthesia equipment and medications for large animals. Through innovation and creativity Soma and his colleagues pushed those boundaries until today there are companies willing and able to manufacture the equipment that complex large animal surgery techniques demand.

Many individuals at Penn Vet contributed to the discoveries and innovations that have changed equine surgery from barbarous procedures in days long past to the sophisticated, safe and relatively routine procedures performed now. The history of the horse is stained with intentional and unintentional cruelties masquerading as treatment. In today’s enlightened era we continue to strive for even better remedies for one of mankind’s most beloved animal partners, but much will depend on the veterinary profession’s ability to invest time, energy and resources to advance its knowledge. As an example, Penn Vet’s implementation of a special initiative to investigate the causes and find a cure for the horse’s most stubborn and elusive foe, laminitis, will require more than $1.5 million to adequately fund. Nevertheless, true to its mission the school is pressing forward with this initiative and with the help of people everywhere who care about the horse and its well being we look to the future with optimism and hope.
Sixty-six years ago, at Penn Vet, a young man named Charlie Raker was named valedictorian of that year’s graduating class. The Class of 1942 was the 55th class to graduate from the school, and the first to graduate while the United States was officially at war. That year, Penn Vet adopted an accelerated education program in response to the needs created by World War II. The last class on the regular program — Dr. Raker’s class — graduated in June, and classes resumed that July. Until 1946, new classes started every nine months.

The Class of 1942 was notable for another reason: the singular quality of its graduates. David Detweiler, for instance, went on to found Penn Vet’s Section of Cardiology and has been called the “father of veterinary cardiology.” Julius Fabricant, still a faculty member at Cornell, became a leading researcher in avian health. And then there was Charles W. Raker. Joining Penn Vet’s faculty in 1950 after eight years in private practice, he is a recognized expert on upper-respiratory surgical techniques in horses and a pioneer in the field of equine joint surgery. Dr. Raker also helped grow New Bolton Center, purchased by the school in 1952, into a premier treatment center for horses and farm animals. But perhaps it is his contribution as a teacher that Dr. Raker remembers most fondly.

“I think the experience of eight years in practice was what students appreciated most,” Dr. Raker explains. “Because it was practical; it was what they were going to experience when they got out. I used to present students with a case they would have and ask them, ‘What are you going to do? How are you going to handle it?’” Well, I’ll

“To teach is to learn twice.”
~ Joseph Joubert, Pensées
takesome blood and I’ll do this and this; they would say. I said, ‘Wait a minute, there’s no laboratory around here. You’re on a farm and here’s a sick animal and you have to make a decision and treat it. How are you going to proceed?’ And that made the students stop and think. We didn’t have all the luxuries of a lab right across the street or down the hall back then.”

Of course that wasn’t the only difference between veterinary education then and now. Long before his teaching days, in 1938, with just a year of undergraduate study under his belt, 18-year-old Charlie decided he’d apply to vet school. The “admissions process” was quick and to the point. “I was asked if I knew how to milk a cow, and I’d had experience with that, so I said yes,” he remembers. “And then they asked, ‘Can you hook up a team of horses and I said yes, too. So, okay, then I was admitted.”

Similarly, Dr. Raker was fast-tracked into a surgery position in 1953—with little previous surgical experience. The school’s one large-animal surgeon had decided to return to Canada, and Dr. Raker was presented with an unexpected offer. “Dr. Mark Allam [dean at the time] and Dr. John Beck [‘50, professor of medicine] asked me if I would agree to accept a position as assistant professor of surgery. I said, ‘Well, I’ll have to think about this, gentlemen.’ Eventually, I told them I would do it under two conditions. I said, ‘First of all, I’m not a large-animal surgeon and I’ve had no training. And I don’t really feel qualified to do what you’re asking me to do on some of these very expensive Thoroughbred racehorses. Really, you must send me somewhere to get some kind of training as a large-animal surgeon.’ And then I said, ‘Number two, if I can’t do this job, I don’t want you to dump me by the roadside or fire me, because I like teaching and I want to stay here.’ Anyway, they agreed to that. So I went to Cornell for two weeks and worked with Dr. Gordon Danks, who originally had been at Bolton Farm. I observed quite a bit of horse surgery, but I never made an incision, I never placed a suture and I never picked up an instrument. I just looked. And that was how I had my surgical training.”

Despite such modest preparation, Dr. Raker was charged with taking over an ailing referral service still in the Old Quadrangle Building in Philadelphia, with its circus-like ambiance of trucks, trailers and vans unloading horses, cows and swine—interspersed with grooms and students exercising animals—all around a dirt patch of land known as “feco field.”
“I can still see those big horse vans driving up on 39th Street in front of that big iron gate,” Dr. Raker remembers with a smile, “and they’d bring these horses off onto that brick walkway and these horses had never been on bricks in their lives before!”

Almost single-handedly, Dr. Raker proceeded to transform Penn Vet’s equine service into one that drew top-quality sport horses from around the country, and the waiting list for elective surgery grew dramatically. “I went to Philadelphia every day from the beginning of 1954 until we moved out here [New Bolton Center] in January 1964. And that’s when I saw a whole lot of horses. Somehow I’d gotten a reputation—a good one, I don’t know how it happened—but I had those 17 stalls in Philadelphia full of horses all the time. I handled the entire caseload until 1957—cows, horses, everything. I was on call 365 days a year. Plus I also was teaching large-animal surgery.”

It was this tremendous workload that prompted Dr. Raker to start the school’s first internship program in equine medicine and surgery. (In fact, one of the first female interns in the field, Dr. Olive K. Britt, got her start with Dr. Raker.) “I got my first intern in ’57. And that was one of our own graduates, Dr. Alan Sayers. Next year, I got another intern, and next year, another—and then I decided I was going to start a residency program. From then on, it just kept mushrooming. We always had two or three interns and a couple of residents on duty. They helped me with cases. And eventually some of them stayed on and became fully qualified staff members. It was quite a busy place at that time.”

In 1967, the renowned Lawrence Baker Sheppard—president of the Hanover Shoe company, head of the U.S. Trotting Association and owner of Hanover Shoe Farm, one of the largest Standardbred horse-breeding facilities in the United States—funded the nation’s first endowed chair of veterinary surgery at a veterinary school. Dr. Raker served in this role through his retirement in 1985, now holding the Lawrence Baker Sheppard Emeritus Professorship of Surgery for the University of Pennsylvania School of Veterinary Medicine.

Although he has been officially out of the classroom for 23 years, Professor is still a way of being—not just a title—for “Dr. Charlie” (as he signs his e-mails). He continues to mentor veterinary students, help with externships and aid in the job search for new graduates. Since 1998, up until this year, Dr. Raker served as the Opportunity Scholarship Fund committee chair and reported approximately 132 scholarships totaling more than $1 million for qualifying veterinary students. The Charles W. Raker Professorship in Equine Surgery, held by Dr. Dean Richardson, is an ongoing tribute paid to him by grateful clients, residents, interns and students. “One of many things that I admire about Dr. Raker was his willingness to accept innovation,” Dr. Richardson says. “A good example is that he was one of the very few surgeons with a lot of experience doing traditional joint surgeries, but he was solely responsible for buying arthroscopic equipment in the very early 1980s and telling us young surgeons to figure out how to use it. He knew arthroscopy would supplant one of the major procedures for which he was known, but he also knew the future wasn’t waiting. He was generous in every possible way to those of us lucky enough to be under him.” And still, nearly every Wednesday, you can find Dr. Raker at New Bolton Center, visiting with colleagues, talking with students, answering questions. “The best teachers learn from their students, and keep learning,” he says with a smile. “I just learn so much from them.”
It’s all about heart—at least, that is, for Dr. Mark Oyama, associate professor of cardiology, and Dr. Meg Sleeper, chief of the Cardiology Section of the Matthew J. Ryan Veterinary Hospital. Their research into diagnosing and curing heart disease can benefit not only the dogs that are the focus of their work, but also people—whose hearts, literally and figuratively, already benefit so much from their connections with these quintessential companion animals.

Like people, dogs can suffer from both congenital and “acquired” heart disease—and even with the development of new technology and medications, even with an ever-broadening knowledge base about the causes and courses of heart disease, illness and death in dogs with heart problems remains high. According to the American Veterinary Medical Association, approximately 3.2 million dogs in the United States that have annual veterinary examinations suffer from some form of acquired heart disease and may be in heart failure. And because of the genetic similarities between dogs and people, the study of many congenital defects that affect one species can lead to breakthroughs with both.

Dr. Oyama has studied how stem cell research might be used to treat dogs with heart disease. Before he came to Penn from the University of Illinois College of Veterinary Medicine in 2005, he investigated how damaged heart cells in dogs could be repaired by transplanting the animals’ own stem cells into their hearts—a process known as cardiac cellular transplantation. But the fundamental biological processes that govern the behavior of these cells remains a mystery, as does the long-term efficacy of the procedure.

“I think people get excited about it because of the huge potential that it has,” Dr. Oyama says. “Even in people, it’s an area about which very little is known. When they’re doing stem cell transplants in people, yes, it appears to improve the heart function, but when you ask the scientists ‘How is it doing that?’ nobody knows. They don’t have any idea. Cells go in there, and somehow they’re making the heart function better.”

Cardiac cellular transplantation could have a marked effect in treating dilated cardiomyopathy, or DCM, the second-most-common acquired heart disease in dogs. Some large breeds, such as Dobermans, great Danes and boxers, are particularly prone to it. DCM causes the heart muscle to lose strength and fail to pump blood properly, and can eventually lead to heart failure. To identify genes that may play a role in the process of the disease, Dr. Oyama and his colleagues used a commercially available gene chip, or microarray, designed for dogs—a 1.5-inch square that contains more than 23,000 genes. When exposed to the genetic material from Doberman dogs that had died from heart disease, genes on the chip lit up if they were active in the sample. The researchers knew the nature and location of the genes on the chip, so they could identify the active genes in the samples and determine their level of activity by the brightness of the fluorescence.

Essentially all 23,000 genes, tested at once, were narrowed down to 167 genes that could play a role in the development of DCM.

Dr. Sleeper, too, has focused on DCM in dogs—but her work primarily has been on treatment. “My primary research interest is therapeutic gene transfer,” says Dr. Sleeper. “Basically, with the procedure in which I am interested, we inject genetic material into the patient’s myocardial cells using a catheter-based approach and a virus, which is not capable of replicating (infection). These cells then produce the gene product: one of several proteins that improve myocardial function. We currently are in the process of proving safety, and once that is complete, my goal is to offer this technique as a therapeutic option for dogs with DCM.” The procedure also offers great potential for humans—and in late 2008 Dr. Sleeper spent time in China treating monkeys to evaluate its feasibility in non-human primates.

A paper published recently in the Journal of the American Veterinary Medical Association (Vol. 233, No. 1, July 2008) and co-authored by Drs. Oyama and Sleeper, as well as Dr. Dottie Brown, associate professor of surgery and associate director of the Veterinary Clinical Investigations Center at Ryan Veterinary Hospital, and other colleagues, attempts to better define the importance of quality versus quantity of life in dogs and cats with heart disease. Probably the first investigation of these issues, the report reveals that successful treatment of heart disease in dogs must acknowledge owner’s perceptions and priorities with regard to their dogs’ quality of life.

“What is more important to owners?” asks Dr. Oyama. “Do they value long life or high quality when forced to reach a balance between the two?” The paper finds that owners of dogs with cardiac disease highly value their pets’ quality of life—and that veterinarians need to address these issues to ensure that the care provided is directed toward the desired goals. Furthermore, veterinarians should continue to help owners reassess their priorities as their pets’ clinical circumstances change. Clinical trials similar to those carried out by the Veterinary Clinical Investigations Center in which therapies for heart disease in dogs are tested should include quality-of-life concerns as endpoints, and future studies also should seek ways to better measure these goals.
Penn Vet Buildings Evolve to Meet Changing Needs

From the day the doors of the University of Pennsylvania’s Veterinary Medicine Department opened on October 24, 1884, our buildings have been struggling to keep up with the changing needs of faculty and students. The initial structure, which included a main building, a wall-enclosed yard, box stalls for 20 horses and a blacksmith shop, was located on a triangular plot of ground bound by Pine Street, 36th Street and Guardian Avenue. The approximate cost: $20,000.

This first structure was followed by an animal hospital that opened on September 1, 1885. In 1886, the first full year of the hospital’s operation, 352 cases were seen. The hospital served patients for 16 years before being torn down in 1901 to make way for an expansion of Penn’s Medicine Department. The Veterinary Department moved to a “temporary/permanent” home at 38th and Woodland Streets, while a new building was being built a block away at 39th and Woodland Streets. Occupied in 1907, the first section built was the Arch entrance on 39th, with successive sections built toward the east on Woodland over the next six years.

The quadrangle of the new building enclosed a grassy plot in honor of the school’s first dean, Rush Shippen Huidekoper. In 1947, a third floor was added to the Quadrangle facility.

New Bolton Center

In 1937, Bolton Farm in Bucks County was donated to Penn. Acquired by the school to provide for its three major functions—education, research and service—it was never a fully active campus. The property was sold in 1952, and operations moved to the aptly named New Bolton Center in Chester County. By the following year, two cement buildings with a total of 5,000 square feet were completed and became the headquarters of clinical work and research.

Manor House, a structure dating to 1710, was part of the original farm. Before the farm was sold, owners restored, remodeled and enlarged the building, which was later named Allam House, in honor of Dean Mark Allam.

The School’s Field Service Unit under the direction of Dr. William Boucher was moved from Media, Pa., to the new campus, initiating a clinical teaching program. In 1957, the caseload was one-and-a-half farm animals a day (referrals only). After discussion with area veterinarians, services were offered to the public to increase the caseload.

From top to bottom, the George D. Widener Hospital for Large Animals, 1964; the Marshak Dairy, 1996; aerial view of New Bolton Center, 2007; rendering of the James C. Moran Jr. Critical Care Center; expected completion date 2009.
Philadelphia

The Gladys Hall Rosenthal Building was the next building to be constructed on the Philadelphia campus; it was completed in 1963 and named in 1974. At that time, the building included the C. J. Marshall Memorial Library as well as research labs for pathology, microbiology, virology, immunology, biochemistry and parasitology along with faculty and administrative offices.

The Veterinary Hospital of the University of Pennsylvania was completed in 1981, and was renamed the Matthew J. Ryan Veterinary Hospital in honor of the speaker of the Pennsylvania House of Representatives. Ryan, who supported the school over three decades, died in the spring of 2003. Here 26 specialties and subspecialties exist under one roof, serving the needs of more than 31,000 patient visits a year.

The Vernon and Shirley Hill Pavilion, Penn Vet’s new academic center, officially opened in November 2006. The building features state-of-the-art lecture halls and seminar rooms and has wireless networking on the first and second floors. The unique “information commons,” also known as the Steven W. Atwood Library, optimizes the convergence of library information with technology.

The Rosenthal Imaging and Treatment Center located at the Ryan Veterinary Hospital, was dedicated in the fall of 2007. The facility houses medical imaging and radiation therapy equipment, as well as two examination rooms, a fully equipped anesthesia prep room, a patient recovery suite and a conference room.

Looking ahead

To ensure the best use of school resources today and in the future, architectural consultants were engaged to create master plans for both campuses. These plans propose a series of projects that are intended to meet the changing needs of researchers, clinicians, staff, students and, of course, animals.

From open lab concepts with shared support space in Philadelphia to the construction of a new isolation and colic facility at New Bolton Center, the plans were designed to improve operational efficiency. Indeed, the school and its hospitals are prepared to meet whatever needs of the Penn Vet community lie ahead.
Top: Veterinary school library between 1907 and 1913; Old Quadrangle Building. Left: Early operating arena. Bottom: The renovated Student Surgery Suite in the Ryan Veterinary Hospital; 2006. The suite is an integral part of the school’s Shelter Animal Medicine Program, which includes the spaying and neutering of homeless animals from the city’s shelters to make them more adoptable.
Top, right: Ambulance for small animals outside the hospital in Philadelphia, 1909. 
Bottom: Steven W. Atwood Library and Information Commons, Hill Pavilion; 2008. The library includes an electronic classroom with 16 workstations. Bottom, right: The Animal Bloodmobile, which is used for canine blood drives organized by individuals, breeders, dog clubs and veterinarians. In 2002 the school acquired an updated model (pictured here). Since the Penn Animal Blood Bank began in 1987, more than 6,000 dogs have participated in the blood-donor program. Currently, close to 1,000 dogs are active donors, making it the largest voluntary canine blood-donor program in the nation.
school highlights

First companion animal teaching hospital in US.

Dr. Leonard Pearson uses tuberculin testing to control bovine tuberculosis.

Penn Vet holds first veterinary continuing education conference for practitioners.

The first brucellosis-free herd of cattle in the U.S. is established by Dr. Ernest C. Deubler, V’11 (pictured left).

The presence of avian influenza virus in the U.S. is detected by Dr. Evan L. Stubbs, V’11 (pictured right).

Dr. Stubbs begins series of papers on leukemia in chickens; his research with Dr. Jacob Furth leads to the isolation of a strain of avian leukemia virus called Strain 13.

Dr. Alfred Kissileff, V’33, successfully produces a calf through artificial insemination, the first in Pennsylvania.

Dr. Otto Stader invents the “Stader Splint,” consisting of adjustable metal rod with steel pins at each end for insertion in bone above and below fracture. The splint eventually was adopted for treating fractures in human patients, including soldiers during World War II.

Dr. Josephine Deubler, V’38, becomes the school’s first female graduate.

Dr. David K. Detweiler and Dr. John T. McGrath, V’43, begin to develop their specialties in veterinary cardiology and neuropathology, respectively.

New Bolton Center becomes the school’s large-animal campus.

Dean Mark Allam reports that in one decade the school’s research efforts had grown by 2,200 percent. The increase was due to the ability of the faculty to attract funds, and to the rearrangement of teaching responsibilities so that most basic science faculty had one semester free for research. With the growth of clinical faculty, even more research time became available.

The Georgia and Philip Hofmann Research Center is established at New Bolton Center to conduct research on the reproductive systems of animals.

Penn Vet receives a training grant for the VMD-PhD Program from the National Institutes of Health. In collaboration with the medical faculty, the school trained the profession’s first full spectrum of clinical specialists as well as large numbers of veterinarian-scientists.

Drs. Robert Brodey and Lonny Rubin start the veterinary specialties of oncology and ophthalmology, respectively.

First veterinary Section of Medical Genetics is established at Penn Vet.

The school introduces a revolutionary core-elective curriculum.

The Comparative Cardiovascular Studies Unit, the Section of Medical Genetics, the Center for the Interaction of Animals and Society, the Center for Food Animal Health and Productivity, Aquavet (a program in aquatic veterinary medicine) and the Bovine Leukemia Research Center—all firsts—are created and well funded. Many serve as multi-disciplinary models emulated by other veterinary schools.

Dr. Jacques Jenny establishes the specialty of orthopaedic surgery in horse development and use of a recovery pool for equine orthopaedic surgery, the first in the world, at New Bolton Center.

Dr. Dean Richardson with 2006 Kentucky Derby winner Barbaro as he is lifted from the recovery pool. Photo by Sabina Louise Pierce.
The world’s first test-tube calf, Virgil, is born. The research team is headed by Dr. Benjamin G. Brackett; this work has had significant impact on embryo transfer in livestock production.

The first transgenic animals are developed. A team led by Drs. Ralph Brinster, V’60, GR’64, HOM’66, and Richard Palmiter fuse elements of a gene that can be regulated by dietary zinc to a rat growth-hormone gene, and inject it into fertilized mouse embryos. The resulting mice, when fed with extra zinc, grow to be huge, and the technique paves the way for a wave of genetic analysis using transgenic mice.

The Inherited Eye Disease Studies Institute is established by Dr. Gustavo Aguirre, C’66, V’68, GR’75.

The Pennsylvania Animal Health and Diagnostic Commission establishes the Pennsylvania Animal Diagnostic Laboratory System at NBC to provide rapid and accurate diagnostic assistance to veterinarians involved with food-fiber animals, equine, aquaculture and wildlife. It protects animals and humans from health threats and minimizes economic loss by providing accurate diagnoses to assist Pennsylvania’s agricultural community in controlling disease.

Dr. Mattie Hendrick, V’78, provides the first link between vaccination and the development of fibrosarcomas in cats.

Connelly Intensive Care Unit/Graham French Neonatal Section, the first building designed specifically for the care of critically ill large animals, opens at New Bolton Center.

First animal bloodmobile in the world enters service at Matthew J. Ryan Veterinary Hospital.

Medical genetics researchers develop first allele specific test for an inherited disease in domestic animals.

PennHIP, a new diagnostic procedure for canine hip dysplasia, is established by Dr. Gail Smith, V’74, GR’82, MTE’70 at the Matthew J. Ryan Veterinary Hospital.

A team at NBC under the guidance of Dr. Jim Ferguson, V’81, HOM’95, develops the concept of systematic breeding of dairy cows in an integrated program, a novel strategy then that is the basis of many programs employed throughout the global dairy industry today. The Marshak Dairy, the first greenhouse-style dairy complex in Pennsylvania, is dedicated.

The Mari Lowe Center for Comparative Oncology Research is established. The center acts as a facilitator and works closely with other centers within the school and across campus to develop broad-based clinical oncology and interdisciplinary cancer research and training programs.

Gilbert S. Kahn endows the first deanship in veterinary medicine in the world.

New swine facility fostering the latest human methods in swine rearing opens at New Bolton Center.

The Veterinary Business Management Association begins as a stand-alone organization founded by three Penn Vet students.

In collaboration with Cornell University researchers, Dr. Aguirre’s team is the first to restore vision in a blind dog using gene therapy.

Penn Vet pioneers the introduction of genetically modified and in vitro grown spermatogonial stem cells into the testis of a sterile mouse. The foreign gene introduced through the male germ cells glows under ultraviolet light in the photograph of transgenic mice. This technology will provide a type of biological immortality to males of many mammalian species.

The university launches the Institute for Regenerative Medicine housed at the school, a new cross-disciplinary endeavor to investigate and harness the therapeutic potential of stem cells in treatment of cancer, diabetes, cardiovascular disease, degenerative diseases, wound healing and aging. Dr. John Gearhart, who led a research team that first identified and isolated human embryonic stem cells, is named director of the institute.

The Veterinary Center for Infectious Diseases is established. The center is committed to improving the health of animals through research on infectious diseases and is home to expertise in virology, bacteriology, parasitology, immunology and epidemiology.
By 1885, only 17 of Penn Vet’s first 29 matriculants—now in their second year of the three-year program—remained, a reduction mainly due to academic failures. During their first year, the students learned chemistry, pharmacy, histology, applied botany, zoology, anatomy and forging. The second year bridged basic studies and the clinical work of the following year, and included new courses in medical chemistry, internal pathology and contagious diseases and practical farriery. Thirteen students began their third year of work in therapeutics, general pathology and morbid anatomy, surgical pathology and operative surgery, internal pathology and contagious diseases, sanitary police (hygiene), obstetrics and zootechnics. Considering the lack of formal education of most of the students, this was a difficult schedule; only 10 students stood in Penn Vet’s first graduating class in 1887.
The 123rd Commencement Exercises of the School of Veterinary Medicine were conducted May 19, 2008. The commencement address was given by Lisa Freeman, DVM, PhD, and the veterinarian’s oath was administered by Robert Feterman, V’90, president of the Pennsylvania Veterinary Medical Association. The Class of 2008 numbers 105 and is composed of 85 women and 20 men. With the Class of 2008, Penn Vet has graduated 6,479 veterinarians.
The most important event affecting admissions in the last 20 years has been the initiation of the Veterinary Medical College Admissions Service. Established in 1996, it nearly doubled Penn Vet’s applicant pool the very first year. We now have the largest applicant pool in more than 50 years, enabling us to put together a very diverse student body both in culture and in veterinary interest. The average grade point average has not fallen below a 3.5 in the last decade and the Graduate Record Examination scores remain high. Penn Vet’s Admissions Committee has focused on recognizing students who are truly interested in attending Penn Vet. As a result, our acceptance rate has increased enormously.
Women have steadily increased their numbers in vet schools throughout the United States and Canada over the last 20 years. According to Jeanne Lofstedt, DVM, in “Gender and Veterinary Medicine” (Can. Vet. J. 44(7), July 2003), “Explanations that have been put forward for the feminization of the veterinary profession include the following: (1) elimination of discrimination at admission based on gender; (2) improvement in chemical restraint for large animals; (3) an increase in the number of female role models, especially in physically challenging aspects of the profession; and (4) the caring image of veterinarians portrayed in books and on television.”
In addition to the many friends of Penn Vet who have supported the school financially over the years, countless others have shared their passion through volunteering. The full spectrum of the Penn Vet family—students, alumni, faculty, staff, friends—have helped move the profession of veterinary medicine forward through their contributions of time, knowledge and effort.

Benjamin Franklin once said, “People volunteering together in a spirit of cooperation could accomplish great things.” This spirit is evident in the efforts of the school’s students. Despite a rigorous curriculum, student volunteerism has been woven into the process of the school since its inception. In 1889, just two years after the first class began its education at the Penn Veterinary College, students organized the Veterinary Medical Society of the University of Pennsylvania, a precursor to the current Student Chapter of the American Medical Association (SCAVMA). Today, Penn Vet’s SCAVMA chapter and the student government support dozens of extracurricular clubs—from “Vet Students Care” Animal Rescue team that mobilizes students into disaster areas, to the Alpha Psi fraternity begun in 1908, to the Veterinary Business Management Association, which coordinates the Business Certificate Program, a business educational enhancement to the core curriculum.

In addition to membership in dozens of formalized clubs, Penn Vet students participate in externships, such as the Navajo Reservation Project, spaying and neutering homeless animals at the Philadelphia Animal Welfare Society, and the annual Run for Rabies.

This “spirit of cooperation” at Penn Vet does not end at graduation, as alumni continue to support their passion for their alma mater and consistently have served as pacesetters in professional and volunteer organizations. The Veterinary Medical Alumni Society (VMAS) was founded June 17, 1887, the day the first veterinary class graduated, and was the first organization of its kind in the United States. Today, VMAS membership includes more than 5,000 living Penn Vet graduates and advanced-
degree recipients (such as residents, interns, postdoctorates and fellows) and is led by almost 20 non-paid board members. Contributions by Penn Vet’s alumni family range from serving on the Student Admissions Committee, providing feedback to the school on curriculum and serving as judges at student research events. Alumni serve as mentors to formal vet students and even “students-to-be” by helping children stitch injured stuffed animals at Penn Vet’s well-known MASH Tent—a community effort supported by alumni, faculty, staff and students.

Alumni also serve as valuable mentors—through established channels like the Opportunity Scholarship Program, or simply by sharing the story of their life paths with students.

With the small- and large-animal hospitals together treating more than 50,000 cases annually, the volunteer programs that involve friends of the school are integral to care delivery. At the Matthew J. Ryan Veterinary Hospital, the volunteer program in the Emergency Service began in 1988. Since then, more than 500 people have participated. Volunteers come with diverse backgrounds—from accounting to graphic arts to the military—and provide necessary services such as restocking, patient restraint, stocking and cleaning. She serves as a member of the school’s new financial planning advisory committee and had helped shape the school’s short- and long-term strategies.

Defining the school’s strategic direction and community outreach also has occurred through the dedication and global knowledge offered by volunteers. The school’s Board of Overseers, formerly the Advisory Board, was developed in 1955. Today, more than 30 individuals in a broad range of disciplines—including education, business, government and agriculture—meet regularly with faculty, staff and students to address the school’s most pressing issues. Current member Eve Lloyd Thompson, president of the Bernice Barbour Foundation, has been an overseer since 2002. She serves as a member of the school’s new development advisory committee and has helped shape the school’s capital campaign strategies.

Penn Vet faculty and staff also thrive on the opportunity to share their passion and talent with the larger community. Through Vet Pets, certified therapy pets of faculty, staff and students visit with families of seriously ill children at the Philadelphia Ronald McDonald House. Pets like Cade, a dog owned by Bob Stewart, Jr., V’99, and Tonya Foster, a nurse at the Rosenthal Imaging and Treatment Center, has been volunteering at the House for more than two years. A retired guide dog and cancer survivor who lost her left front leg to mast-cell cytoma, Cade selflessly shares the unspoken understanding of illness and recovery with her child friends and offers the “creature comfort of home” to these children and their families.

Non-human volunteers are not without other opportunities to give, and most contributions by animals for animals literally are life-saving. Through the Penn Animal Blood Bank and Bloodmobile, thousands of units of dog plasma are collected annually and processed into a variety of blood products, and 300 blood transfusions occur monthly through the “Pets Helping Pets Program” at the Ryan Veterinary Hospital. Donor cats in the Feline Renal Transplant Program actually provide a transplant kidney to an ailing pet of a client, and are subsequently rewarded with a new feline companion and a loving home. New Bolton Center animals also volunteer their services to patients. Through the large-animal blood-donor program, equine, bovine, caprine and ovine patients receive life-saving blood transfusions and plasma directly from NBC’s teaching herds.

Ben Franklin would be proud that the spirit of volunteerism—of both humans and animals—has helped the School of Veterinary Medicine accomplish great things each and every day.
alumni memories

ROBERT E. DONAHUE, V'81 Although many memories as a veterinary student have now fallen to the wayside, a few moments do remain rather vivid. I started veterinary school in 1977 wanting to be an orthopaedic surgeon. My inspiration was Dr. Chuck Newton and Dr. David Nunamaker. They both took me under their wings.

I was responsible as a work-study student for printing their course notes with Ashra Markowitz and spent many a memorable afternoon with her at the mimeograph machine. I cannot thank them enough for all that they did for me in my formative years.

As a freshman, it was Dr. Leon Weiss and Dr. Lillian Maggio (later Price) who enthralled me with their lectures on hematopoiesis. I was infected by their enthusiasm, and they were the ones who got me started. It was then Dr. Robert Brodey, Dr. Anne Jeglum and Dr. Karen Young who finished me off.

Over my years as a student, my roomies—Gary and Corrine Quinn and John Gliatto—brought joy into my life. I have lost touch, but they know that they will forever have a place in my heart. Of course, I will never forget the lack of sleep I experienced at the Red Fox Inn by having Ted and Ron as neighbors. I believe we were also the last class to use the Red Fox Inn. Although somewhat blurred, I will also never forget our after-hours exploration of the bar in Society Hill and Bob Wagner following me with clam shells. Thankfully no pictures exist of any of these adventures.

I now direct a program at the National Heart, Lung, and Blood Institute evaluating gene transfer and stem cell transplantation in non-human primates after attending the Harvard School of Public Health and working at the Dana Farber Cancer Institute and the Genetics Institute. I am certain I wouldn’t be where I am today if it weren’t for these individuals.

EMILY GRAVES, V'99 I am sure many of the funny or nostalgic stories shared by fellow alumni are about odd or challenging animal interactions. Yes, I had my share, but one of the most memorable experiences from my four years at Penn Vet was all about my human colleagues.

My memorable story comes from my first student job. I had the privilege of working with Dr. Mark Haskins, who always insisted that he be called Mark, not Dr. Haskins. I had a work-study job during the academic year and also stayed on during the summer. During this summer work, all the student employees obviously spent a good amount of time together. I nonchalantly mentioned to a few colleagues that I had decided to finally get a tattoo on my ankle. I had mulled this over for years and thought it was time.

Well, near the end of the summer, Mark treated all of us in the labs to a great dinner to say “thank you.” We had a large group and enjoyed some great food. At the end of the meal, Mark made an announcement—to me. After hearing of my desire to be tattooed and my struggle to save the money to do so, he and my co-workers had collected money and were ready to accompany me to the South Street tattoo parlor that I had selected.

The artist I had chosen was not working that night, but within 48 hours, I had my tattoo thanks to the support of my friends that summer. Thanks to Mark and my co-workers in the summer of 1997! This story still puts a smile on my face today.

ED MALLINSON, V’56 An exciting lifelong career in avian medicine began during my senior year, when faculty inspiration and encouragement—and student generosity—led to weeks of hands-on poultry diagnostic work in Vineland, N.J. Without the fascinating microbiology and pathology presentations by Dr. Evan Stubbs, the advice Penn Vet faculty to seek the broadest practice exposure possible, and the willingness of fellow students to “opt out” and trade trips to various area practices (I hadn’t been slated for any trip to Vineland), I would have missed a great opportunity.

There in Vineland, under the watchful eye of Dr. Otto Schwabe and a fortunate visit from Dr. Fred Beaudette, one of the pioneers in avian medicine, I found my calling. It gratefully continues long into retirement.

LEA MCGOVERN, V’55 Picture this: A naive city girl, fresh from academies and an all-girl college, meeting for the first time with Dr. Bill Boucher, and the mysteries (for me) of large-animal medicine! Trying to teach me how to hit the jugular vein on a cow, he said, “Throw it like a baseball,” then frustratingly added, “But you’re a girl, and don’t know how to throw a baseball.” It was hard for both of us—him trying to communicate with me, and me trying to learn from him.

My inner self said, “I’m going to show this guy,” and vowed to ace his course. After the first test the blue book was returned, with a large, hand-written note from Dr. Boucher simply saying: “Bury the shovel” and an A. I learned more from him than he ever knew.
**ROBERT L. LEIGHTON, V’41**

The instruction in Small Animal Surgery was in a primordial state. Many students were aware of this. They had either worked for some of the advanced veterinary practices or their fathers were veterinarians and they had been helping for half their lifetimes. I had been the surgical technician for the Angell Memorial Animal Hospital during the summers for two years. During this time, I had been given the task of spaying six cats or four dogs from 8:00 a.m. to 12 noon, five days a week. This freed up the veterinary staff there for the more difficult surgeries.

I got permission from the dean to use the space under the semicircular lecture room at the back of the building. The left-hand side was a concrete empty space. On a weekend we painted the walls gray. The paint came from a leftoversupply for motors on boats. A table, light, instrument stand and refurbished sink were prepared. The suitable dogs were obtained from the local SPCA. I brought drapes, towels, caps, masks, gowns, gloves, syringes, suture material, needles, pentobarbital sodium and instruments from Angell. We did have some hair clippers. I proceeded to demonstrate the spay. A very fine veterinarian from Silver Spring, Md., had lectured to us on the aseptic method of surgery. No demonstration had ever been performed before then. I believe about half the class was instructed in the spring of 1941. The supplier of the dog got to be an assistant.

I have often wondered if the little room is still painted gray. Little did I know at the time that I would end up teaching surgery as a full professor.

---

**SALLY MYTON, V’69**

I had wanted to be a veterinarian since childhood. Graduation Day 1969 was a dream come true. I had to work hard for that degree. Freshman year I failed chemistry and had to take a re-exam. A lot of students had failed, so I was not alone. Back in the sixties, female vet students were a definite minority. When we broke up into groups for senior year we were told “each group has to take a woman. If there is anyone who has not found a group, they will be assigned one.” I was not really close to any of my classmates. I figured I would be the one assigned. What a good feeling it was when I was asked to join a group.

Junior year, I failed another course. Failing students were notified over the loudspeaker to go to a phone. Everybody knew what it meant when you were paged. I was told I had failed Medicine but was granted a re-exam. I walked back to my group. I wondered if they even cared that I might flunk out. Maybe they would be glad not to have a girl in their group after all. I was wrong. I could tell they all felt bad for me. One student lent me his notes. Several students took my Emergency duty so I could study. They knew I might not be there to pay them back, but they did it anyhow. I took the test. Once more, I got paged to the phone. I had passed! The group broke out in big smiles when I told them. I felt accepted. Thank you, guys.

---

**MARC ROSENBERG, V’71**

As a fourth-year student, I spent my scheduled rotations at New Bolton Center. There was no going to class and then returning home; there you worked, ate and slept with one another, day in and day out. I had a close group of classmates with whom I spent my off-hours talking about veterinary classes, and how we longed to get back to Philadelphia and our own beds and days that did not begin at 5:00 a.m.

As the guys were standing around the barn at the end of the day, Dean Bob Marshak pulled up in his beige golf cart and asked who among us would like to help draw blood from his leukemia herd. I volunteered—after all, this was the dean and a world-renowned researcher of leukemia in cattle. I could see the brownie points accumulating. I, Marc Rosenberg, would have a leg up on the rest of my veterinary buddies.

I returned to the group the next day and told them how Dean Marshak and I were now very close. He thought I did a great job and, in fact, “Bob” and I might just get together socially. Imagine that: Marc Rosenberg, friend of Bob Marshak! As I’m telling the story, the dean comes riding by in his electric golf cart. I step away from my fellow classmates to give my new friend a greeting as he passes. He catches my eye, waves and says, “Hi, Melvin, how are you doing?” and keeps going. I turned around to the group and was greeted by cheers of “Hi, Melvin!” and never was allowed to forget my new title for the duration of my stay at New Bolton Center.

---

If you would like to share your memories and photos of your student years at Penn Vet, please e-mail them to Coreen Haggerty, haggertc@vet.upenn.edu. We will add your memories to our 125th Anniversary and Alumni sections of our Web site.
Dr. Kurt D. Hankenson was awarded the Fuller Albright Award by the American Society of Bone and Mineral Research (ASBMR) in September 2008. Dr. Hankenson, assistant professor of cell biology, is the first veterinarian to receive the award, given in recognition of meritorious scientific accomplishment in the bone and mineral field to an ASBMR member who has not turned 41 by July of the award year.

In October 2008, Dr. Corinne Sweeney, professor of medicine and associate dean for the New Bolton Center, was named chairwoman of the Commonwealth’s Horse Racing Commission.

In April 2008, Dr. Michael Atchison, professor of biochemistry and director of the VMD-PhD program, received a Christian R. and Mary F. Lindback Award for Distinguished Teaching. The Lindback Awards, presented to members of Penn’s standing faculty since 1961, were established by the Christian R. and Mary F. Lindback Foundation to recognize distinguished teaching at colleges and universities throughout the mid-Atlantic service area of Abbott’s Dairies, Inc. Christian Lindback was president and principal of Abbott’s Dairies.

In December 2008, Dr. Colin Harvey, professor of surgery and dentistry at Ryan Veterinary Hospital, was appointed to the new Canine Health Board, charged with making key decisions on standards for flooring, lighting and ventilation for commercial breeding kennels in the Commonwealth of Pennsylvania.

In September 2008, Dr. Karen Rosenthal was appointed medical director of the Ryan Veterinary Hospital. The appointment is for a four-year period with annual reviews. Dr. Rosenthal has served as director and section chief of Special Species Medicine and Surgery.

In October 2008, Dr. Tracy Bale, assistant professor of neuroscience in the Department of Animal Biology, was appointed the first director of Penn Vet’s neuroscience program. Along with infectious disease, comparative oncology and regenerative medicine, neuroscience is one of Penn Vet’s four translational research focus areas.

In September 2008, Dr. Richard O. Davies, professor emeritus of physiology, was appointed by the university’s provost to a two-year term as chair of the Department of Clinical Studies, Philadelphia.

In June 2008, Dr. Louise Southwood Parente, assistant professor of emergency medicine and critical care at New Bolton Center, received the Pfizer Animal Health Award for Research Excellence at the annual faculty research retreat.

Drs. Sarah L. Teegarden and Tracy L. Bale in the Department of Animal Biology were awarded the 2008 Ziskind-Somerfeld Research Award given for the top science paper of the year. The paper, “Decreases in Dietary Preference Produce Increased Emotionality and Risk for Dietary Relapse” (*Biological Psychiatry* 2007; 61), demonstrated that stress contributes to increased consumption of food high in fat and carbohydrates and possibly could increase the risk of obesity.

Dr. David Artis, assistant professor in the Department of Pathobiology, was selected as a 2008 Investigator in the Pathogenesis of Infectious Disease Award by the Burroughs Wellcome Fund. The selection was based on his proposal’s scientific excellence and innovation, the strength of the scholarly environment at Penn Vet and his accomplishments as an independent researcher.

Dr. Carrie Tupper Hume, third-year oncology resident, received the Robert S. Brodey Memorial Award for Clinical Science. At the annual conference of the Veterinary Cancer Society, Dr. Tupper Hume delivered a presentation describing the results of a collaborative study between the Oncology and Radiology sections at the Ryan Veterinary Hospital.

Dr. Adrian Morrison, professor emeritus of behavioral neuroscience, has published *An Odyssey with Animals*: *A Veterinarian’s Reflections on the Animals Rights & Welfare Debate*. The book from Oxford University Press describes the culmination of Dr. Morrison’s decades of reflection, scholarly research into the animal rights issue and firsthand work with animals.

Gail Luciani, executive director of public relations, and Jennifer Rench, marketing and communication coordinator, received the university’s Commitment to Excellence award for their outstanding communications work during Barbaro’s lengthy stay and extensive treatment in 2006 and 2007 at Penn Vet’s New Bolton Center. The Commitment to Excellence program was introduced in 2004 to offer a way for leadership to recognize outstanding commitment to Penn goals in the face of extraordinary external circumstances.
In August 2008, the Pennsylvania Veterinary Medicine Association (PVMA) presented the Distinguished Veterinary Service Award to **Dr. James A. Orsini**, associate professor of surgery and director of Penn Vet’s Laminitis Institute. The PVMA also named **Dr. Joan C. Hendricks, V’79, GR’80**, the Gilbert S. Kahn Dean of Veterinary Medicine, as recipient of the Veterinarian of the Year Award, given annually to a PVMA member for outstanding achievement in veterinary medicine over the past year. In addition, **Dr. Lisa Murphy, V’97**, assistant professor of toxicology, was installed as president of the PVMA.

In June 2008, **Dr. Cindy Otto**, associate professor of critical care, received the Distinguished Alumni Award from The Ohio State University College of Veterinary Medicine.

**Dr. Samuel K. Chacko**, professor of pathology in the Department of Pathobiology, and director of basic urology research in the Department of Surgery, School of Medicine, received a George O’Brien Urology Research Center grant for $6.1 million spread over five years from The National Institute of Diabetes and Digestive and Kidney Diseases.

The Awards for Publication Excellence named **Bellwether** the most improved magazine of 2007–2008. With close to 4,500 entries across dozens of categories, this year’s annual competition was exceptionally intense.

**Quarter-Century Club**

Staff contributions to Penn Vet have been incalculable over the years, and the following staff members have been part of the Penn Vet family for at least 25 years.

- Eileen A. Adams
- Richard J. Aucamp
- Mary Avarbock
- Patricia I. Bodek
- Alberta Lee Brittingham
- Cynthia J. Brockett
- Janet E. Brooks
- Deborah D. Bruce
- Thomas R. Caldwell
- Randy K. Crossan
- Wendy Curtis-Uhle
- Judy H. Delaney
- Maureen A. Dorton
- Anne L. Drumheller
- Karen F. Fishman
- Clarence Freeman
- William Garman
- Ann C. Gregor
- Joseph B. Haines
- Beth Annette Harvey
- Suzanne Hindman
- Carole F. Johnson
- Janet Kimberly Johnston
- Debra Lefferts
- Thomas F. Lewis
- Susan R. Lindborg
- Ellen Marie Lomastro
- Kathleen A. Maher
- David J. Maitland
- Donna M. Maloney
- Grazia L. Mann
- Ashra Pearl Markowitz
- Joseph J. McGrane
- Lawrence E. Nann
- Donna A. Oakley
- Carolyn E. Pope
- Sally R. Powell
- Michael G. Raducha
- Patricia J. Rechle
- James E. Riggins
- Valerie L. Robinson
- Mary Lou Rosazza
- Eileen Dawn Rule
- Pamela J. Salsbury
- Mary V. Scotti
- Chrisann J. Sorgenroni
- Shane B. Stowell
- Barry Stupine
- Mary K. Taylor
- Virginia A. Topkis
- Charles A. Tucker
- Bonnie Vecchiarelli
- Michael C. Weaver
- Dolores W. Welch

**deaths**

**Bill Coring**, large-animal attendant and stallion handler at the George D. Widener Hospital, died suddenly on October 25, 2008 from cardiac arrest. He had been employed at New Bolton Center for more than 20 years.

**Dr. Ellis Croshaw** died April 25, 2008 after open-heart surgery. He taught anatomy at Penn Vet from 1954 to 1966, after which he left to join the faculty of Delaware Valley College in Doylestown, Pa. as professor of animal science. Dr. Croshaw also practiced medicine in Boyle County since 1975.

**Dr. Robert M. Kenney** died in May 2008 after a long illness. Dr. Kenney joined Penn Vet as associate professor in 1969. From 1973 to 1983 he was chief of the Section of Reproductive Studies at the Department of Clinical Studies at New Bolton Center. As a reproductive pathologist, Dr. Kenney developed the concept, scientific basis, technique and interpretation of uterine biopsy in the mare.

**Dr. Monica Reynolds** died of age-related causes on April 19, 2008. Dr. Reynolds was professor of physiology at Penn Vet from 1949 to 1979 and for many years was a pathologist at New Bolton Center.

**Dr. James R. Rooney**, former pathology professor at Penn Vet, died of complications from lung and bladder cancer on September 5, 2008 at his home in Chestertown, Md. Dr. Rooney was professor emeritus at the University of Kentucky, where he taught until he retired in 1989. He taught at Penn Vet from 1968 until 1976.
1944 – Mary Clark Keyser has written two novels: *The Secret Lives of Doctors* and *Mary, Mary, Quite Contrary* (a murder mystery based on her time as a student at Penn Vet). She is working on a third book, *Mary, Mary, Do Be Mary*, in which the action starts the day she graduated from veterinary school.

1955 – Ava Logan, an award-winning singer-actress, recently released her first major CD recording, *So Many Stars*. Dr. Logan, a classically trained vocalist, still practices veterinary medicine, in addition to performing jazz, pop and rhythm and blues in the U.S. and abroad.


1959 – In 1997 Uri Bargai was awarded an honorary distinction of merit at the Annual Conference of the Israel Dairy Cattle Sciences for his lifelong contribution to the promotion of the Israeli dairy industry. Dr. Bargai is professor emeritus at the Koret School of Veterinary Medicine at the Hebrew University in Israel.

1965 – Seth Koch recently produced an instructional video, *Parotid Duct Transposition in the Dog*. Considered an expert in the area of parotid duct surgery, Dr. Koch is a member of the Veterinary Emergency and Referral Group in Brooklyn, N.Y.

1972 – In June, Catherine Walleigh Carnevale retired after 34 years of service with the U.S. Food and Drug Administration (FDA). She was director of international affairs at the FDA’s Center for Food Safety and Applied Nutrition and served as the country’s lead delegate to the Codex Alimentarius Committee on Food Import/Export Inspection and Certification Systems. Dr. Carnevale also was the FDA’s lead foods negotiator in the North American Free Trade Agreement and in the Uruguay Round negotiations that resulted in the World Trade Organization Agreement on the Application of Sanitary and Phytosanitary Measures in 1994.

1974 – Theodore B. Robinson was selected by the American Veterinary Medical Association to receive the 2008 Meritorious Service Award for the volunteer project involving veterinary care on Native American reservations he began eight years ago, in which Penn Vet students still participate.

1977 – Christian E. Newcomer, associate provost for animal research and resources at Johns Hopkins University, was appointed executive director of the Association for the Assessment and Accreditation of Laboratory Animal Care International, which offers the only international accreditation program for institutions that use animals in scientific and medical research.

1979 – Sydney M. Evans has been accepted into the year-long Hedwig van Ameringen Executive Leadership in Academic Medicine's Program for Women at Drexel University for 2009. The program is the nation’s only in–depth program focused on preparing senior women faculty at schools of medicine, dentistry and public health to move into positions of leadership. Dr. Evans, also an M.D., is a faculty member in the Department of Radiation Oncology at Penn Medicine.

1981 – Renate Reimschuessel was named a finalist for the 2008 Homeland Security Medal, which recognizes a federal employee for a significant contribution to the nation in activities related to homeland security (including border and transportation security, emergency preparedness and response, intelligence and law enforcement).

1985 – Jamie Thomson was elected into the National Academy of Science for being a pioneer in his field and his success in culturing and maintaining human embryonic stem cells. Membership in the society is considered one of the greatest honors for a scientist or engineer. Earlier this year, Dr. Thomson was appointed director of the Morgridge Institute for Research at the University of Wisconsin–Madison.

1990 – Marian Siegel was named Good Doctor of the Year by the Maryland Veterinary Medical Association for her work with feral cats. The award is given in recognition of outstanding leadership, dedication and continued commitment to the veterinary profession, namely her involvement in the rescue of feral and tame unwanted cats and kittens and mentoring to numerous high school students.
Dr. Seigel works at the Metropolitan Cat Hospital in Owings Mills, Md.

1992 – In April, **Patty Hogan** opened a new clinic, Hogan Equine LLC at Fair Winds Farm in Brattleboro, Vt. Dr. Hogan also will continue to work at the Ruffian Equine Medical Center at Belmont Park in Elmont, N.Y. She is perhaps best known for saving the eye of Smarty Jones after he seriously injured himself at Philadelphia Park Racetrack in 2004. Earlier this year, the Equine Science Center at Rutgers University in New Brunswick, N.J., honored Dr. Hogan with the “Spirit of the Horse” award, which recognizes people whose lives have been profoundly changed due to their involvement with horses and who have acknowledged the impact on their lives by giving back to horses or the horse industry.

1997 – In March, **Alisa Siceloff** gave birth to Savannah Isabella Siceloff. Dr. Siceloff has two other children, Alexis and Rex.

1997 – **Bonnie Shope** recently passed the boards in veterinary dentistry and is now a diplomat of the American Veterinary Dental College. Dr. Shope works at Veterinary Dental Services in Acton, Mass.

1997 – **Amy Bentz** was appointed veterinarian manager of the Professional Service Center of Veterinary Learning Systems, a division of MedMedia USA, Inc. Dr. Bentz, a diplomate of the American College of Veterinary Internal Medicine, also serves as equine chair for the Pennsylvania Veterinary Medical Association’s Scientific Program Committee. In 2005 she received an award for the Most Outstanding Equine Abstract from the International Veterinary Emergency and Critical Care Society. Since 2006 Dr. Bentz has served as a National Research Service Award Postdoctoral Fellow at Penn Vet.

2000s

2000 – **Anne E. Hessinger** recently finished a two-month internship with the World Organization for Animal Health at its headquarters in Paris, France. Dr. Hessinger became board certified in the American College of Veterinary Preventive Medicine in June 2007. She has been promoted to the rank of major in the U.S. Army and is awaiting her next assignment as a civil affairs veterinarian.

2007 – Pennsylvania governor Ed Rendell announced nine appointments to the new Canine Health Board, charged with making key decisions on standards for flooring, lighting and ventilation for commercial breeding kennels in Pennsylvania. **Jennifer Muller**, small-animal practitioner and member of the Governor’s Dog Law Advisory Board, was named board chair.

2008 – The French Creek Veterinary Hospital in Pottstown, Pa., and its sister hospital, the County Companion Animal Hospital in Morgantown, Pa., announced the hire of **Casey Kurtz**, whose professional interests include orthopaedic surgery, dermatology and ophthalmology.

**Deaths**

1943 – **Clayton I. Blum** on October 8, 2008.
1952 – **Raymond J. Widmann, Sr.**, on April 17, 2008.
1960 – **John E. Del Favero** on October 6, 2008.
1963 – **Clayton Kimble** on June 20, 2008.
1986 – **Saint George Hunt** on December 4, 2008.

**Alumni Connections**

Are you familiar with Penn’s On-Line Alumni Community? It provides a free service to all Penn graduates that allows you to find a former classmate, sign up for an e-mail forwarding service and update your alumni record.

As we reactivate the class agent program, you can register and update your contact information by visiting www.alumnicommunities.com/olc/pub/UPN.

Once registered, you can search the On-Line Directory networking and an easy way to keep up-to-date on fellow alums. The permanent e-mail forwarding service will forward messages received at your permanent Penn e-mail address to the one of your choice.

Another way to reconnect with Penn Vet and classmates: Take advantage of the Penn Vet Alumni Society’s electronic communications system, a listserv, by which you can keep in touch with your classmates. The listserv is free and your privacy is ensured. Send your preferred e-mail address to haggertc@vet.upenn.edu, or call 215-898-1481 for details.
My Fellow Penn Vet Alums,

As you can see from this special issue of Bellwether, our school has gone through many changes over the course of 125 years. We began as the Veterinary Department of the School of Medicine—and look at us now!

I was informed, recently, that for many alumni the term “Penn Vet”—or more specifically, the casual shortening of the word “veterinarian” to “vet”—is grating and unwelcome. These alumni remember very clearly having the value of the full word—clearly pronounced—instilled in them. It was seen as a mark of the pride we have in our profession to enunciate every syllable. Since I was a student when the decision to formally “brand” the University of Pennsylvania as “Penn” was made—after much debate—I fully understand the impact such a change can have.

The overarching goal of using the term “Penn Vet” is to provide a memorable, easy to pronounce means of identifying our school—and of identifying it as part of the University of Pennsylvania. We want any mention of outstanding achievements—by students, faculty, staff, alumni—or the school as a whole—to be identifiable from our institution. In a word, we want to be “branded.” You will see—on our Web pages, on our buildings, and in our communications—that we are using the unifying logo that carries the distinctive mark of Penn. Indeed, the publicity attendant on the Penn Vet World Awards has only helped further increase our impact.

I hope this clarifies our intent, and that you will all continue to be proud alumni of Penn Vet (which is the School of Veterinary Medicine of the University of Pennsylvania!).

—JOAN C. HENDRICKS, V’79, GR’80
THE GILBERT S. KAHN
DEAN OF VETERINARY MEDICINE

ADVANCE REGISTRATION:
Through Wednesday, February 25, 2009

REGISTER NOW AT:
www.vet.upenn.edu/PAC2009
There is always surprise discovering that yet another year has passed in a flurry of events, celebrations, professional and volunteer obligations—and the seemingly endless list of things to do grows rather than shrinks.

As Penn Vet celebrates its milestone birthday of 125 years in 2009, the Veterinary Medical Alumni Society has also seen 121 flurried, hurried years pass by, while I have just racked up one year as president of this group that serves as the voice of our alumni body.

All Penn Vet alumni can look back to our predecessors with pride and respect, but ought to appreciate that our school has even more accomplishment lying ahead. Ultimately, our legacy begins every year as a new, fresh class begins its veterinary path at Penn Vet, as evidenced by the incoming Class of 2012. For this expanded class (134 students, quite a bump from the usual 105), the Admissions Committee found record applications (approximately 1,500), record qualifications (GPA/GRE scores as high as they’ve ever been) and secured a “full” class plus captured several deferred matriculants—a head start, as it were, on composing next year’s class. And a hopeful composition: more production animal interests, more PhDs, more public health interest—areas that have been struggling to attract veterinary recruits, but areas of veterinary medicine the world now demands and respects. Our students arrive knowing a lot more about our program; they do their homework before even making application; they are poised and diverse. Our new Web site (www.vet.upenn.edu) is one resource they (and you!) can use to answer questions.

I encourage all to pull down the menu under “Alumni” on the Penn Vet Web site, and take a look at the class listservs. Ping your classmates, and give them an update on your life. Or ask them about theirs, post a knotty medical problem or regale them with a humorous anecdote. I’m always pleased to bump into a V’90 at a meeting or on campus and get brought up-to-date.

And two awesome opportunities to bump into your classmates and some of your faculty are the Penn Annual Conference in March and Alumni Weekend in May. The Penn Annual Conference now serves as our largest “unofficial” homecoming for Penn Vet, with 700 attendees attending over two days from March 12 to 13, 2009. Return to campus for Alumni Weekend on May 15 and 16, 2009, see the exciting improvements to the campus and share a bit of birthday cake with us as we tip our hat to the University of Pennsylvania School of Veterinary Medicine.

—MICHAEL MOYER, V’90
PRESIDENT, VMAS

Honor your patients by participating in the Penn Vet Pet Memorial Program!

Established in 1982, Penn Vet’s Pet Memorial Program consists of a large group of practitioners throughout the region making thoughtful contributions to the Matthew J. Ryan Veterinary Hospital, Pennsylvania’s only small animal teaching veterinary hospital, in memory of their clients’ pets. The program provides much needed financial support to help fund the treatment and care of Penn Vet’s animal patients.

Cost:
$150 for a pack of 12 cards
10% discount on your order of 3 packs or more
$15.00 per card if we mail the cards for you

For more information and an order form, go to www.vet.upenn.edu/Giving/Pet_Memorial_Program or call 215-746-7460.

“For over 25 years, we have utilized the Penn Vet Pet Memorial Program. We are not only expressing sympathy for the loss of a loved one, but financially supporting the Matthew J. Ryan Veterinary Hospital, and spreading awareness of Penn Vet’s contributions to animal medicine.”

Hank Craft, VMD, V78
Owner, Loyalhanna Veterinary Clinic
MARCH 2009

Wednesday, March 11 –
Friday, March 13
Penn Annual Conference 2009: Save the Date!
www.vet.upenn.edu/PAC2009
Sheraton City Center Hotel – Philadelphia, PA
CONTACT: Darleen Coles at coles@vet.upenn.edu or 215.746.2421.
PennHIP and Full-Conference activities focusing on “Surgical Strategies: Find It and Fix It.”

Thursday, March 19 –
Saturday, March 21
Penn Vet Student Research Day & VMD/PhD Program 40th Anniversary Reunion
survey.vet.upenn.edu/index.php?sid=58783
Vernon & Shirley Hill Pavilion – Philadelphia, PA
CONTACT: Gayle Joseph at viale@vet.upenn.edu or 215.898.2294

MAY 2009

Friday, May 15 & Saturday, May 16
Alumni Weekend 2009: Save the Date!
Remembering all alumni; Celebrating classes ending in ‘4 and ‘9; Honoring the 25th & 50th reunion classes of 1984 & 1959.
CONTACT: Coreen Haggerty at haggertyc@vet.upenn.edu or 215.898.1481

Friday – TOURS, REUNION RECEPTION and CLASS DINNERS at the Allam House, New Bolton Center
Saturday – OPEN HOUSE & LIGHT LUNCH at the Hill Pavilion, Philadelphia Campus; MASH TENT at Quakerkids Party

Monday, May 18
Penn Vet Commencement
of the Class of 2009
Zellerbach Theater, Annenberg Center — Philadelphia, PA

JUNE 2009

Wednesday, June 17
Penn’s School of Medicine BRB Building II/III – Philadelphia, PA
Symposium organizers: John H. Wolfe, V.M.D., Ph.D., professor and director, Walter Flato Goodman Center for Comparative Medical Genetics
To honor our history during the 125th Anniversary year, we will have a celebratory research symposium to highlight contributions and focus on a bright future of research on animal diseases in biomedicine. Several distinguished external speakers are invited as well as Penn Vet faculty, who will present studies in animal diseases that have, or may, facilitate translation of basic studies to clinical application. The focus of the symposium will be on naturally occurring animal diseases in the domestic animal species, including both captive and clinical populations. Translational research, interpreted broadly, can include any therapeutic strategy, such as transplantation, pharmacologic, recombinant protein, genetic, stem cell, surgical, engineering, synthetic, electronic, nano-technologies and other approaches, as well as understanding mechanisms of disease to provide new avenues for therapy. Talks will focus on clinical diseases that can be studied to advance medicine for all species.
EXECUTIVE VETERINARY LEADERSHIP PROGRAM:
Making an Impact as Public Health Leaders  ■ June 7–12, 2009 ■ Philadelphia, PA

Take your seat at the table.

Offered by the University of Pennsylvania School of Veterinary Medicine and the Wharton School, this groundbreaking program prepares veterinary leaders to make greater contributions in public health and business leadership. This five-day program covers such topics as:

- The current state of veterinary medicine from a business context
- Critical thinking and peripheral vision
- Influence and persuasion
- Rebranding the veterinary profession
- Challenges and opportunities for veterinary medicine
- Leading change
- Working across boundaries
- Action plans for post-program development

“Veterinarians want to be—and need to be—partners for disease control and other major global health, biosecurity, and food supply issues; this program is about helping them get a seat at the table.”

— Dr. Joan C. Hendricks, The Gilbert S. Kahn Dean
University of Pennsylvania School of Veterinary Medicine

Become a change agent in the veterinary profession.
This program is open to veterinary leaders and those aspiring to leadership positions.

For more information or to enroll, contact Rosemary Bloser at +1.215.898.1657 or rbloser@wharton.upenn.edu or go to http://www.pennvetleadership.com.
LET THE FACTS SHOW YOU WHY RIMADYL® (carprofen) SHOULD BE YOUR FIRST CHOICE.

Get the facts and find out why RIMADYL is #1 at www.rimadyl.com/facts or ask your Pfizer representative.