Going the distance in equine practice
Mike Wildenstein fits Karen Trotter's Morgan, Fury, with a rimmed shoe that he has precision-crafted to the exact contours of the hoof. According to Wildenstein, it is the hardest shoe there is to make.
Horses are a study in improbability. Their bodies are massive, commonly weighing 1,000 pounds or more. Set on long, thick necks, their huge heads serve as counterweights to their hind ends, causing them to look something like oil derricks pumping up and down as they canter. All that mass is held up by four spindly columns of bone that have to line up just so as they pass through a series of delicate-looking joints. Underneath those columns, where the rubber meets the road, so to speak, everything — including the fate of the horse — rests on four overgrown toenails called hooves. Far, far too many times to count, a diseased or injured hoof has spelled the end of an otherwise vital animal.

Miranda Paton thinks a lot about equine mechanics as she rides her show hunter, Lobster. The ten-year-old horse has structural “issues” that require careful preventive maintenance in the shoe department. As Paton discourses on the selection pressures that have led horses to evolve as the powerful but precariously built creatures that they are, Michael Wildenstein, Cornell’s resident farrier, is giving two veterinary students a leg-by-leg tour of Lobster’s special kinks and quirks. As Wildenstein moves all around and under his perimeter, Lobster unconcernedly munches hay out of the net that the farrier has thoughtfully hung above the ring where the horse is tethered.

“Look down the limb,” he tells the students. “See that bump on the knee here? The cannon bone comes straight, and then from the fetlock down he goes in. Now let’s stand him up.” He sets the leg down and, with mild mock surprise, exclaims, “Oh, now it goes out! Look down his radius... radius looks good, right? The radius is going in that direction. And then his cannon bone comes out of the side of his knee and is

Only one farrier in the United States has passed his profession’s most exacting test and done it with honors. Meet Cornell’s Michael Wildenstein.
angled and comes down this way. And then the fetlock goes in, right? So when we’re evaluating them we try to refrain from saying ‘toed-in’ or ‘toed-out’ and really break it down to exactly what’s going on and where it’s going on: whether it’s angular, meaning it’s in the joint or in the bone; whether it’s rotational, meaning the whole bone or the whole joint is twisted or going off at an angle; whether they’re off-set, meaning the joint has one bone coming in here and the other bone coming out there. So, as Miranda said, Lobster has issues. But he’s an adult horse, right? We’re not going to change that. What we’re trying to do is allow him to use what he’s got to the best of his ability.” After detailing the reasons for the disparity between landing and load-bearing areas of the first hoof in question, Wildenstein concludes, “So what we need to do is increase ground-reaction forces laterally along the outside, but not the whole side, just the back fourth. That’s what we do every time we shoe him...”

He then snatches a hoof knife from his rolling tool kit and deftly pares the bottom of the hoof. It is fascinating to watch Wildenstein in motion; he wastes none of it. Speaking softly but very surely, he teaches constantly as he works, explaining the logic and the mechanics behind everything he is doing. Whether he is speaking to a client, a veterinary student, an apprentice farrier, a visiting colleague, a clinician, or a curious visitor, his manner is low-key and gracious. He greets every new arrival to his shop like an old friend, and that is what many of them become. Such total ease is the hallmark of a man who knows his worth and loves his work. This particular man is one of the very best farriers in the world. Wildenstein traveled to London, England in late August to receive the highest distinction available to practitioners of his craft: certification as a fellow of the Worshipful Company of Farriers, a guild founded in 1356. Wildenstein is one of only 40 farriers living who have passed this ultimate test of mastery. Furthermore, he is only the fourth living, and the first American ever, to receive his fellowship with an honors designation. During the awards ceremony, held in a church a half-century older than the Company, the enumeration of Wildenstein’s accomplishments took half an hour. As the master farrier exited the stage, the 40-odd journeyman farriers waiting to receive their basic diplomas extended their hands to him, one after another. He shook them all.

Wildenstein has a whole boxful of shoes that he made for the fellowship examination and for the associate level that he attained with the Company in 2000. All were fashioned from sections of steel bar stock that he heated to incandescence in his forge and beat into shape on an anvil, much as farriers have done since before the Roman invasion of Britain. But while the technique is ages old, the design and precision craftsmanship of these shoes are like nothing his ancient brethren could have imagined. With their front, back, or lateral elevation, removable plates, shortened sides, special cushioning, rolled toes, frog support, extra-wide stance, or supporting bars, they address a long list of specific problems, whether caused by disease, injury, or conformational defects.
Paton points out that Wildenstein also works in other media besides steel. "He makes braces for foals with crooked legs out of PVC pipe. He can go where knowledge of anatomy and biomechanics meet practical stuff like: How do you melt PVC? How much time do you have to move it around before it hardens? How do you make sure that it won't rub the baby's fur?"

Not all of the farrier's work is with equines, either. Wildenstein says he treats "pigs, cows, calves, whatever," using adhesives and other materials. He has had the opportunity to trim up some grizzly bears and a tiger. He also trimmed the beak of a toucan once. When asked if he just improvises in such cases, he responds with a bemused smile, "Impvise? What do you mean? A claw is a claw; a nail is a nail. It's all keratinous tissue."

Back in his shop a few weeks before his trip to England, Wildenstein is drawing a bit of a crowd while he works on Karen Trotter's Morgan, Fury. Fury has a fracture down the middle of the coffin bone in his right hind hoof, and Wildenstein has made him a shoe with a rim all around that prevents the hoof from expanding when it bears weight. In this way the hoof acts as a cast to support the fractured bone. "It has to fit so perfectly," says Trotter. "Even

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- A dissertation of at least 3,000 words based on the candidate's personal research, prepared in advance and defended during the examination;
- The ability to speak to a small audience with confidence on a wide range of farriery-related subjects, to be demonstrated by preparing a 20-minute lecture within one hour on a subject set by the examiners and then delivering the lecture;
- An oral examination covering the thesis, the lecture, and/or other aspects of anatomy, surgical shoeing, or defects of the horse's foot.

Wildenstein's thesis, "Fungal Infections of the Horse's Hoof: A Detailed Examination," was published this summer in the journal Hoofcare & Lameness along with an announcement of his achievement. More information can be found at www.hoofcare.com.
though it's large and heavy, this is a fine, fine piece of art." She considers and then adds, "Better than art." It is the most difficult shoe there is to make, and for this reason Wildenstein chose to make one for the fellowship examination.

"If you have a therapeutic shoeing need, if you need some sort of special shoe put on a horse, Mike is the one to go to," says Fury's veterinarian, Jeff LaPoint, DVM '93 of Finger Lakes Equine Practice, who is standing by to consult. "If you have a laminitic horse, a horse that is trying to lose its hoof, this is the person to bring the horse to. I tell my clients when I send them to Mike that it's like going to the Ferrari mechanic instead of your Volkswagen mechanic. It's just a much higher level of analysis and fine-tuning."

Wildenstein gets enough invitations to lecture that he could be on the road every weekend, but he holds to a schedule of once a month, flying all over the country. He makes at least two lecture trips to Europe every year. He has one book published and another in the works; he is co-writing it in Danish with his collaborator and translating it into English for publication here. He has served as an examiner in the U.S. and Denmark, and he has now been invited to help judge the associateship and fellowship examinations of the Worshipful Company of Farriers. He estimates that he gets 30 calls per day for consultations, whether from down the road or the other side of the world. Alumni who know him from their student days call for advice while out on calls; practitioners send him radiographs and digital images on a regular basis. "Yesterday we had a call from Brazil, about a laminitic horse, and another from Israel. No foreign ones today, though," he says with a smile. "Pennsylvania was the furthest away."

Of the 35,000 to 40,000 farriers in the U.S., Wildenstein trains only nine per year, three at a time. He is limited by the dimensions of a shop built in 1957, a period when the horse census was at a low ebb, and designed with only one farrier and one student in mind. "I send out a lot of 'Dear John' letters," he says. He knows how it feels to get one. It took him three years to gain entrance to his program, which was started in 1913 and soon recognized as a premier training course. The building still stands on Garden Avenue, the leftmost of the three brick buildings lined up to the right of Barton Hall, but it no longer belongs to the College of Veterinary Medicine. It got left behind in the move up Tower Road and is now occupied by the School of Industrial and Labor Relations.

While Mike Wildenstein can only squeeze three students and two horses into his smithy out behind the equine performance treadmill, Asmus's students had the use of the entire second floor of his building, which was then a single room. An article in the Horse-shoers' Journal, circa 1920, gushed that the room contained 14 windows, a half-dozen forges "of the very latest and most perfect type," and "abundant floor room for a number of horses" in addition to every tool and amenity imaginable to a farriery student. It was, the article proclaimed, "the very finest place of its kind to be found in the country."

As if that weren't enough, the article also advertised that it cost about $8.00 per week for good room and board in Ithaca. Imagine that.
into Cornell's program, and then only after he had given up and enrolled in a draft-horse course at the agricultural college in Truro, Nova Scotia, Canada's easternmost maritime province. He was the first American to venture that way. His instructor there recognized his ability and referred him back to Cornell, and he was promised a spot in the farriery course some months later.

Following his Cornell training, Wildenstein spent several months in Connecticut with the Kriz brothers, farriers to the Budweiser Clydesdales. When spring came, he went out on his own, specializing in draft show horses and traveling the country. Six years later he moved to Denmark with his new wife, Gry, a Danish veterinarian. There he had the honor of serving as farrier to the Danish state warmblood stallions, from which their equine Olympic competitors are chosen, and had the unforgettable experience of giving a circus elephant a pedicure. He returned to the U.S. in 1991 to begin his present position at Cornell.

Wildenstein got his first training from his grandfather, who had shod horses in the early 1900s. On his grandfather's farm he learned how to work with draft horses, something he still does at home on his own farm. He financed his college education by shoeing horses and by using his own draft horses to take timber out of remote wooded areas in New York and New England. He especially remembers taking horses across the ice on New Hampshire's largest lake, Winnipesaukee, to haul fallen timber off several islands.

As if dragging trees for miles across a frozen lake with heavy horses were not enough to cause nightmares, Wildenstein had previously spent two years in the Coast Guard training cold-water survival instructors in Maine. The teaching itself wasn't the hard part. "When I wasn't teaching I was jumping out of helicopters and pulling in people," he says calmly. "I worked from Long Island to the Canadian border, so anytime there was a rescue, they'd pick me up and away we'd go." He estimates that he made 200 trips per year. More often than not, those were retrieval, not rescue, missions; anyone who was already in the water was likely to die of exposure before he could get there. Still, he was able to save a good number of people by being lowered onto sinking boats and hooking their passengers to a rope suspended from the helicopter. He did this work untethered. "It makes you weird for a while," he says honestly. "It's very hard."

Wildenstein's work now is all about saving horses, and he probably saves as many of them from euthanasia as he once saved people from drowning. But he emphasizes that happy endings always involve teamwork with the clinicians in the Cornell University Hospital for Animals. "It's always a group of people who make it happen," he says. He tells of one client who is still bringing her horse to him, years after the animal's laminitis was successfully treated. "Nine years ago her local veterinarians told her she needed to put the horse down," he says. "Last year she won a national championship with the horse."

Alta Leuschner is another true believer. Her lovely Peruvian paso, Nina, is doing better than anyone expected after developing a disastrous case of...
laminitis. It has been only four months since surgeon Michael Schramme, an assistant professor in Cornell's Equine Hospital, performed a dorsal hoofwall resection, but Nina is surprisingly far along in her recovery. After Schramme removed a good part of her hoof, Wildenstein created a partial shoe designed to keep weight off the injured section and began the careful process of debridement necessary to prevent repeated abscesses from developing as the hoof gradually healed. "The day we came to Cornell and got connected with Mike was the best day of Nina's life, really," says Leuschner. "He has saved her life. Even Dr. Schramme says it's a miracle the way she has progressed."

Nina's foot is still tender, and she gently registers discomfort from the concussion of the hammer strikes. Wildenstein pounds four nails as rapidly as possible and twists off their points where they protrude outward through the hoof wall. Before filing them down and nailing the next shoe, he reaches up into the paso's extravagantly long mane and begins massaging a point near the top of her head, casually conversing all the while in his usual soothing tone. The horse's head lowers and her shoulder blades droop just as surely as if she had been given a sedative. Every horse has a special spot where she likes to be petted, and Wildenstein knows Nina's. The horse relaxes, and he continues his work.

When he has finished shoeing her, Wildenstein encourages everyone to go out to Nina's trailer and have a look at her magnificent tack. Hanging there awaiting her recovery are a silverbeaded bridle and a tall, shapely saddle wrapped in chased silver and hung with silver stirrups and elaborately tooled leather skirts. So much hope is invested in this horse. It could not have been placed in better hands.

Among the curiosities to be found in the College's archives is a small ledger of the kind sold a century ago in the five-and-ten-cent store. Underneath the pile of browned clipplings and folded tablet pages stuffed inside its cover is an elaborately penned title in purple ink: The Ransford H. Garlock Book of Horse Recipes.

Kelley's business card, which is also stuck into the book, identifies him as a veterinary surgeon and dentist and as secretary of the New York State Board of Veterinary Medical Examiners. With such credentials and scientifically grounded associates, it seems unlikely that he thought much of the following "quick cure" that someone had clipped from a newspaper:

"Clean out the frog of the foot; let it be well cleansed by scraping out all the dirt. Raise the foot so as not to run over the hoof; then set the turpentine on fire, and let it be entirely consumed. If the above does not cure a foundered horse, as soon as the operation is over, then your readers may doubt all further recipes from Veritas."

Law and Moore obviously had their work cut out for them.
On a pleasant morning in high summer, the billowy green pastures southwest of Rochester invite daydreaming as they flow past the windows of Ann Dwyer's custom-modified Chevy Silverado. Every now and then she runs the heel of her hand down her leg as she drives; it must be bothering her. It is a bit past ten o'clock, and she has a colicky foal already bound for Cornell and eleven hours and well over a hundred miles ahead of her before she will return to the clinic to start in on the night's paperwork and follow-up calls. Equine practice has undeniable rewards, but it is not an easy life.

In between cell-phone calls to clients and her staff at the Genesee Valley Equine Clinic (GVEC) in Scottsville, New York, the 1983 Cornell DVM admits that this isn't a great week to ask her how she's feeling. Seven days ago she got trampled at the clinic when a horse came barreling across the pasture and broadsided her own mare as Dwyer was holding her lead. It would be bad for anyone to get knocked to the ground and left with a hoof print on her lower back, but the mishap posed a greater danger to Dwyer than to most people. This was not her first collision with a horse.

Three summers ago, during a vacation in Montana, Dwyer was critically injured when the quarter horse she was riding reared up and flipped over backwards, landing on top of her. It would be four months before she was able to return to work. "Suddenly our three-DVM-plus-intern practice became two DVMs plus an intern, and the boss was out of the picture," she told an audience of equine practitioners at Cornell in November, 2000.

It was nothing short of miraculous that Dwyer was standing at that podium three months after her accident. But she had come to the conference on crutches.

THREE CORNELL DVMS LOOK AT LIFE AND EQUINE PRACTICE
to tell her peers not about her own survival, but about that of her business, which had come through the crisis essentially unscathed. Practice management is one of Dwyer's many passions, and she outlined for her audience all the financial, accounting, and personnel decisions that have enabled her to build a beautiful new clinic and triple the size of her business — to 3,000 clients — since buying GVEC in 1995. But her first prescription to her fellow practitioners did not involve numbers. “Hire the best people you can, at all levels,” she advised them. She had done so, and the proof was in the way that they had carried on without her.

Dwyer's senior-most veterinary colleague, Amy Rath Leibeck, DVM '94, began buying into the practice in the year following the accident. Dwyer is delighted with the way their strengths complement each other. Following graduation from the State University of New York at Potsdam, Leibeck taught high-school science for three years and coached volleyball, soccer, and track before entering veterinary college at Cornell. After graduation she interned at Rood & Riddle Equine Hospital, a full-service mega-practice in Lexington, Kentucky. Dwyer views this background as a great asset, and has made use of Leibeck's leadership skills by handing her responsibility for personnel and scheduling, a matter of intricate logistics in a four-veterinarian ambulatory practice that ranges 30 miles in all directions. "I am so fortunate to have linked up with her," says Dwyer. "She is a wonderful person and a great clinician, and she is great with people."

Like Leibeck and Dwyer, GVEC's two associate veterinarians are also Cornellians: Celeste Boatwright, DVM '90, a Dartmouth graduate who grew up in New Hampshire, and Ithaca native Rebecca Posner, an undergraduate alumna of Cornell and a 2000 graduate of the Royal College of Veterinary Medicine in London, England. After interning at New Bolton Center at the University of Pennsylvania, Boatwright spent two years as a staff veterinarian at New England Equine Practice in Westchester County, New York and two
Amy Leibeck, DVM '94

years as an instructor at Cornell. After coming to GVEC she took additional training through the International Veterinary Acupuncture Society. Posner has a year of small-animal experience, gained practicing in England.

It is hard to miss the fact that every member of the staff at GVEC — the veterinarians, the two licensed veterinary technicians, the office manager and assistants, the barn manager and assistant, the weekend and student helpers, and intern Laura Perez, a newly graduated Cornell DVM — is female. “I think we get called ‘Petticoat Junction’ sometimes,” laughs Dwyer, “but the practice is not all-female by design. I would love to hire a guy, but there just aren’t that many out there, and I haven’t seen anyone walk in the door who has been quite the caliber of the people who are on staff right now. I have a dream team here.”

Dwyer has the looks of a dream boss as well. After the extreme demands of her work as a young associate veterinarian forced her to make some hard choices in her own life, she resolved to offer her employees a better chance than she had had at a life outside of work. So when Boatwright declined her offer of partnership and instead expressed the wish to scale back to “part-time” — still about a 40-hour week in the busy season — Dwyer endorsed her choice and hired Posner. When Leibeck gave birth to daughter Riley last November, Dwyer and the others picked up the slack during her maternity leave. When office manager Kathy Stein faced emergency surgery and a two-month medical leave at the height of the foaling season this year, Dwyer and the staff not only divided up her work but set up a schedule to cover the cooking of meals for her and her young children. “I have to make sure that the dynamics of the practice flow so that we can accommodate life changes,” says Dwyer. “It’s a challenge, but it’s fun.”

In truth, it can require heroic effort, especially from the owners. Equine practice has gotten far more demanding, and the hours are “over the top,” in Leibeck’s words, six months out of the year. Even with understanding colleagues, the only reason that parenthood has been feasible for Leibeck and her husband, Steve, a very busy farrier, is that his mother is available and willing to care for their daughter until one of them is free to fetch her in the evening.

The necessity of temporarily shifting administrative responsibilities away first from Dwyer, then Leibeck, then Stein has proven to everyone that they can adapt and grow in their jobs. Says Leibeck, “We have definitely passed a lot more on for the staff to do, let go of a lot of things. This allows the veterinarians to spend more time seeing horses, talking to clients, and educating, and frees up Kathy to do more innovative things.” GVEC has also added a second licensed veterinary technician and hired students to help with evening chores, but such measures can only take part of the extra load off the owners and associates. Dwyer thinks that the future of sane and successful equine practice everywhere may lie in group practice with larger numbers of associates and a shorter work week for all.

Dwyer, Leibeck, Stein, and barn manager Laura Johnson meet monthly coming to GVEC she took additional training through the International Veterinary Acupuncture Society. Posner has a year of small-animal experience, gained practicing in England.
to develop the agenda for their full staff meetings, which they take turns running, and to identify longer-term goals. During the staff meetings they review inventory, talk about new products, and update one another on patients or changes in protocols over a provided lunch. "So there is a time each month when everyone can either gripe or praise or make a change, and that has helped a lot with the flow of things here," says Leibeck. Morale also benefits, thinks Leibeck, from the dedication to excellence in patient care and service to clients that the veterinarians demonstrate every day on the job. The high quality of the work environment is reflected in the fact that GVEC has lost only one employee in the eight years since Dwyer bought the practice.

Dwyer has shown considerable acumen in managing GVEC's financial health, but doctoring horses is often more expensive and less profitable than small-animal practice. Leibeck has determined that she and her associates spend more than one-fourth of their time on the road, time that can never be compensated at a professional rate of pay. According to Dwyer, each of GVEC's four specially equipped trucks represents a $75,000 to $80,000 investment when fully stocked with equipment and supplies. She has calculated that she and her colleagues put 100,000 miles on each of them in three years. "The economics are staggering," she says.

Whatever the difficulties and drawbacks, Leibeck loves her work. "I certainly feel rewarded at the end of the day," she says. "I like the combination of brain and brawn in equine practice." Even performing the more routine procedures gives her satisfaction, because she is able to make a horse feel better. Leibeck even sees a benefit in all the driving she does. "I like being part of the agricultural scene, seeing that the wheat is up or being able to buy sweet corn while I'm working. I like going to clients' places; I like getting to know people at that level. I get to know their kids, their cat and their dog, the whole thing." As for the danger inherent in working with horses, she replies, "I've had worse injuries from cats than I've had from any horse."

There are days and seasons, of

The kaleidoscope has turned a quarter turn, and I want to be there to help it keep turning. – Ann Dwyer, DVM '83

Dwyer vets Rusty, a leopard appaloosa, for a prospective buyer.
course, when the work load eases and the world takes on a better rounded aspect. Leibeck savors those chances to catch up on the important details of her clients’ lives. “This horse community I am a part of has afforded me the opportunity to share so many good, and not-so-good, things with the families we care for,” she says. “I find every autumn that, as the tempo lessens, the focus on life in general gets larger. It is all entirely worth it.”

Boatwright agrees about the rewards of her work. But after ten years of full-time practice, she felt that she needed to restore some balance to her life. A dedicated equestrian and triathlete, she wanted time to compete in a few horse trials and to enjoy her husband’s company. “People think of equine practice as sort of a dream job,” she says, “but it’s not glamorous. It’s stinky, it’s smelly, you get hurt, and it probably won’t make you a millionaire. You do it because you love it. I love it so much, and I didn’t want to be forced to quit in order to have a personal life.” Fortunately, she never had to make that choice. She talked to Dwyer and they worked out a new arrangement. She now works three weekdays instead of four and 10 weekends per year.

Still, Boatwright thinks it is essential for newly graduated equine veterinarians to jump straight into the deep end. “When you’re new, you need to put in some hours. You need to handle emergencies, because you learn by being forced to make decisions. I learned so much during my first two years in practice. I put in so many hours, with minimal days off, but it paid off in the end.”

As majority practice owner, Dwyer spends all of her time in the deep end. “In the 20 years that I’ve done this, I feel like I’ve worked the equivalent of at least 30 years,” she says candidly. Although she has recovered to a remarkable extent from her accident, the lingering effects of her injuries will make it more difficult to continue handling horses for many more years, and the idea of an earlier retirement is beginning to look attractive. “Every day you go out there, and things can change in an instant,” she says. “Even routine procedures can turn dangerous unexpectedly when you’re working with a 1,200-pound animal. I don’t like the idea of hanging on, trying to do something when I’m halfway compromised.” She has most of the business angles worked out. The hard part will be choosing among all the interests she would like to pursue more seriously.

In her “spare time” (she laughs when she says this), Dwyer serves as a director of the National Bank of Geneva. She recently got her old cello repaired and thinks about playing it again. She would like to consult and teach practice management. She wants to get back to studying ophthalmology, something she pursued on her own by attending grand rounds with the MDs at the University of Rochester and participating in some research projects there. “There are still a lot of unanswered questions. I am convinced that the horse holds keys to some of the big questions in human blindness and eye inflammation,” she says.

She has also felt a pull to write since the days, before veterinary college,
when she galloped thoroughbreds for hall-of-famer Flint S. "Scotty" Schulhofer and other trainers at Belmont, Hialeah, Laurel, and other racetracks. "I was quite a gypsy," she remembers. "That was my dream, and my parents' horror. The racetrack is such an intense place, and you're so alive when you're there, that, if you have any sort of inclination as a writer, you just want to nail it. I lived the life, and all the time I was too busy to sit down and write about it." If genetics count for anything, she should succeed famously when she does. Her cousin, Laura Hillenbrand, delivered a transcendent account of Depression-era horseracing in a gem of a bestseller called *Seabiscuit, an American Legend.* Dwyer looks forward to having that greatest of luxuries — more time — to enjoy other pursuits in retirement, but she is also concerned with improving quality of life for the equine practitioners who will still be active or are yet to come. Although she does everything possible to reward her own employees, her capacity to ease their loads — much less her own — is limited by other forces in the market and in the profession. But she has recently found an opportunity to start reshaping those forces.

Dwyer has begun meeting with a newly formed management group composed of owners of two- to five-associate equine practices from across the nation. The group meets for intensive weekend retreats where troubles are laid bare and the members work together to evolve better business practices. "We are going to accomplish financial and philosophical benchmarks," she explains: "how you treat your staff, how you hire and compensate people, how you compensate yourself, what your services are worth, what you're here to do. It's about economics, so we talk a lot about money, but we end up talking a lot more about how our work relates to our place here on earth."

She was particularly struck by one conversation that underscored the contrast between female and male experiences of combined parenthood and practice ownership. While one single mother feels the need to conceal family reasons for canceling appointments, a new father in the group reported that his clients are delighted to hear that he gives priority to his parenting obligations. "You can examine that story from a number of different perspectives," Dwyer muses. "He is still not the primary caretaker, but I feel like the kaleidoscope has turned a quarter turn, and I want to be there to help it keep turning."

As Dwyer and her colleagues travel in endless loops from Lake Ontario to the southern Finger Lakes, each of them almost always brings along a student or an intern. "We talk with them all day long in the car," Dwyer says, "and we don't just talk about cases. The students who come here are all on this 'I'm going to go to vet school right after college' thing. I usually sit them down and ask them, 'When else are you going to be this unencumbered to find out what life is really all about? If you've always had a dream to go to Madagascar and study chimpanzees, why don't you do that before you get locked in?' That's how you're going to find your heart and find what speaks to you."

Horses speak volumes to every one of the women who work at GVEC. But Ann Dwyer knows that there is a life beyond the practice, and she deeply believes that, sooner or later, everyone needs to have a chance to live it.
Morris Frank, the first person to own a Seeing Eye dog, traveled the country in the 1930s campaigning for public accommodations for the visually impaired. One step ahead of him, and essential to his mission, was a German shepherd named Buddy. An outstanding ambassador for the Morristown, New Jersey school that had trained him, Buddy became almost as famous as Rin Tin Tin.

But by 1939 Buddy had a problem, and that meant that Morris Frank had a problem, too. Buddy’s kidneys were beginning to fail, and Frank faced the prospect of losing his cherished and priceless companion. Well accustomed to circumventing obstacles, Frank was determined to extend Buddy’s life for as long as possible. The only effective way to do that was to control his diet.

Such was the advice of Dr. Mark L. Morris, a veterinarian Frank consulted in Edison, New Jersey. Morris, owner of the Raritan Hospital for Animals and a 1926 graduate of Cornell University’s College of Veterinary Medicine, had already blazed trails of his own. Four years after building the second small-animal hospital in the United States, he had gone on to found the American Animal Hospital Association with six of his fellow practitioners and to serve as its founding president. He was one of the first veterinarians to use clinical pathology in an individual practice, and he developed several of the tests himself. Of greater interest to Frank, however, was that Morris had developed a special diet for dogs with renal failure.

Dr. Morris’s special diet was a dry cereal mix that he dispensed in boxes. The idea, according to his son, Mark Morris, Jr., DVM ’58, was to take it home and mix it with fat drippings and a bit of boiled beef or egg. When Morris, Sr. explained this to Frank, the blind man protested that he would not be able to manage this, especially not while he was on the road. He wanted Morris to provide him with a ready-to-eat food in a container he could open in his hotel room to feed to Buddy.

That job fell to Morris’s wife, Louise, who started preparing Buddy’s food on the kitchen stove in the apartment above the practice. Since the country was at war and the availability of tin cans strictly limited, Mrs. Morris had to pack the dog food in glass jars for shipment to Mr. Frank.

“After about two months of this,” recalls the younger Morris, who was about ten years old at the time, “Morris

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**RECIPE FOR SUCCESS**

Morris Frank and Buddy traveled the country promoting the guide-dog organization the Seeing Eye. Frank spurred the school’s founding and later did the same for Hill’s Prescription Diet*. 

*Photos courtesy of Mark Morris, Jr.*
Frank came back to the hospital and said, ‘Louise, this doesn’t work. The glass jars get broken in shipment, and I can’t tell whether there are pieces of glass in there, because I can’t see them. I’m afraid to feed it to Buddy. You’ve got to put this diet in a tin can.’

Dr. Morris protested that he had no government priority for tin cans. Frank countered that he knew the president of a major can company and would get Morris the tin cans. "Two weeks later," relates the son, "a semi-tractor-trailer truck backed up to a veterinary hospital in Edison, New Jersey with 2,000 tin cans and a little hand-sealing machine, and that was the beginning of therapeutic nutrition in veterinary medicine."

Practitioners who had interned at Raritan started requesting some of the canned diet for their own patients. When the senior Morris gave clinical pathology lectures explaining how to diagnose problems like kidney disease, the attendees wanted to know what to do to manage the disease once it was diagnosed. Well, offered Morris, maybe he could ask his wife to cook up a few more batches of the food she was making for Buddy Frank. And so it went. (Interestingly, the Morrises’ very early customers included a Connecticut practitioner by the name of R. W. Kirk. Kirk, a 1946 Cornell DVM who later joined the College faculty as a professor of small-animal medicine, is best known for his successive editions of Current Veterinary Therapy, those indispensable volumes that can be found on clinicians’ bookshelves worldwide.)

Mrs. Morris moved her canning operation to the garage of the Raritan Hospital and soon had three women working the hand-sealing machine in consecutive shifts, 24 hours per day. When demand threatened to exceed their production capability, Dr. Morris made contact with the president of the Hill Packing Company, which manufactured a commercial line of canned dog food. He asked if the company would make a small run of his special diets after completing their regular production run each day. Hill’s started producing four of Morris’s recipes within the first two years. Although Hill’s handled production and distribution, Morris retained control of research and development, quality control, and professional education, forming a corporate entity called Mark Morris Associates.

“My father has been called a dog food peddler, but it was all to try to keep Buddy alive, so that this Seeing Eye dog could function for this blind man,” explains Morris, Jr. “That’s the only reason that k/d® was put into a can.”

However unanticipated the demand for his first product may have been, Morris took his success in stride and soon fixed his sights on a larger goal. Concerned about the near-total lack of funding available for research to benefit companion animals, he decided in 1948 to establish the Morris Animal Foundation. For the first 20 years he built the foundation’s endowment by donating half a cent from the sale of every can of Prescription Diet®. Mark Morris, Jr., who now manages that endowment, believes that Morris Animal Foundation is currently the largest non-governmental source of companion-animal research funding in the world. This year it will fund 105 university-based research grants totaling more than four million dollars.

Growing up over his father’s practice and watching at his mother’s elbow as their therapeutic nutrition enterprise got its start, Mark Morris, Jr. got irresistibly caught up in it all. After following his father’s path to veterinary college at Cornell he returned home, which by then meant Topeka, Kansas, and plunged enthusiastically into nutrition research for the family business.

His career got abruptly rerouted three months later, however, by a summons to report for induction into the in-
The Raritan Hospital for Animals was only the second small-animal hospital to be established in the United States. The Morris family lived upstairs.

Mr. Frank got Dr. Morris a shipment of tin cans, and Mrs. Morris went to work filling them for Buddy. So began the therapeutic nutrition industry for veterinary medicine.

Following his release from the army, he headed to the University of Wisconsin at Madison to study pathology and nutrition. "It worked out very, very well for me," he says. "I took a degree in veterinary science, but most of my work was done in the department of biochemistry, which at that time had very famous nutritionists. The president of the university was Conrad Elvehjem, the man who discovered vitamin A. Steenbock, the man who discovered vitamin D, had his laboratory in the department. So biochemistry in those days at Wisconsin had a nutritional orientation. It served the exact purpose that I wanted." Morris completed master's and doctoral degrees and returned to Topeka to head the research program at Mark Morris Associates.

In his 30 years with the company, Morris says he developed about 135 products, 68 of which are still on the market. In addition to expanding and refining the Prescription Diet line that his father had pioneered, the younger Morris introduced a new line of products under the banner of Science Diet. The development of Science Diet® followed an entirely logical progression. "In the development of diets to manage disease, you have to restrict certain nutrients because of pathologic changes in the organ systems that make animals unable to deal with nutrient excesses that a normal animal would be able to tolerate," he explains. "As we worked through those therapeutic challenges, it became obvious that the consumption of excess nutrients by normal animals, over long periods of time, had detrimental effects in the latter years of the animal's life. It's very similar to the continued consumption of large amounts of salt or saturated fat by human beings and the incredible consumption of refined carbohydrate — sugar — and its relationship over time to the development of type-II diabetes. The animal-owning public thinks that the more nutrients a food contains, the better it is. In fact, the whole program of preventive medicine embodied in Science Diet® is exactly the opposite concept — that is, restricting excessive nutrients."

Morris, ever the researcher, originally developed Science Diet® with laboratory animals in mind. His goal was to simplify the high-quality care of research animals while eliminating the food-induced variables that could distort study findings, and for five years the product was sold only to research institutions. Just like his father, he was unaware of what a marketable product he had until the market came to him. "Probably the most significant event in my professional life was a continuing education lecture that I gave at the Colorado Veterinary Medical Association's annual meeting back in the middle 1960s," Morris remembers. "After I talked about the use of diet in managing renal failure and heart disease and various other clinical entities in small animals, Frank Candlin, a veterinary practitioner from Denver, said, 'Mark, why don't you give us a good brand of food that we can depend on, that we can recommend to our clients with confidence?' I never had thought about that much," he continues. "I said to Frank, 'Oh, those foods already exist!'" Morris went back to Topeka and convinced Hill's to market Science Diet® to veterinarians. "The story kind of goes from there," he says simply.

Ironically, Morris himself has type-II diabetes, but he manages it by diet alone. He is pleased at the changes that are beginning to be seen even in fast-food offerings; he finds that he can get a nutritious salad at any of the major chains now. But most humans do not opt for an optimum diet. "When you look at the animals in America, whether they be zoo animals or pets, they are far better fed than the human
If you were going to be put on a desert island for a month and could have only one product to eat, the one product that would best meet your nutritional needs would be pet food. — Mark Morris, Jr.

Mark Morris, Jr., DVM '58

Clinical Nutrition with Lon Lewis, a veterinary clinical nutritionist he had recruited from Colorado State University. Now in its fourth edition, the textbook has been translated into four other languages. Morris has also lectured on nutrition as an adjunct professor at most of the veterinary colleges in the U.S. and Canada, and abroad.

Mark Morris’s life took another unexpected turn in 1988 when the Colgate Palmolive Company, which had acquired Hill’s Pet Nutrition as an incidental part of a much larger merger, approached him with an offer to buy Mark Morris Associates and his research laboratory facilities. “When someone wants to buy something,” he notes, “that’s the time when you should sell it.” So at age 55 he found himself very well fixed financially and faced with a decision to make about how I was going to deal with the assets, the results of that sale.”

Morris and his wife, Bette, whom he met at Cornell while she was working toward her master's degree in nutrition (which she later followed with a PhD from Kansas State), are both active in charitable pursuits and sit on several non-profit boards of directors. The couple began attending seminars together in New York City in order to learn how to invest assets and manage endowments. The training opened up a second career to Mark Morris. He now chairs the investment committees for 11 non-profit endowments ranging in size from that of his local church to the $50 million portfolio he manages for Morris Animal Foundation. For this investment strategy is not that different from developing a new pet food: “You develop a hypothesis, you develop a research plan, you execute that research plan, you gather data, you interpret the results, and you take action.” Over the last four years, he reports, the investment return for Morris Animal Foundation has been 53 percent, while the stock market has nearly mirrored that degree of change in its plunge into the red.

Clearly, Mark Morris has been handed some extraordinary opportunities in life. But just as clearly, he would not be the success that he is if he had not possessed the knowledge, imagination, and drive to make the most of those opportunities. He credits Cornell with much of his success.

“If you’re blessed with a decent brain and a body that doesn’t give out on you too fast, life is good. And the education I got at Cornell really has taken me through life in excellent condition. Now that I look back 45 years after graduation, I can’t think of a better way to have been educated. The fundamental education that was given to me by people like E. P. Leonard, William Hagan, Robert Kirk, Malcolm Miller, Howard Evans, H. H. Dukes, Peter Olafson, and John Whitlock, I could not have duplicated anywhere in the veterinary world. It has stood me in very good position for what I have had to do during my lifetime.”

population. We as a species select our diet each day from the foods that we like, that are convenient, or are closest at hand. "That's not a very good way to create a nutritious diet."

On the veterinary lecture circuit, Morris likes to tell his audiences that he always carries a bag of dry k/d® with him when he pilots his plane into remote areas where he might be lost for a few days if his plane went down. "If I had water and dry k/d®, I could survive until I was found. I'm not advocating it for humans, but pet food is the best nutritionally balanced product in the supermarket. If you were going to be put on a desert island for a month and could have only one product to eat, the one product that would best meet your nutritional needs would be pet food."

After realizing that zoo animals were being fed whatever their keepers' budgets and ingenuity allowed for on any given day, Morris also developed a line of foods for them, called Zu/Preem®. He describes this project as his "fun thing in life." His conviction that inadequate nutrition was contributing to the failure of some zoo animals to reproduce was first affirmed in 1970, when the diet he was developing for carnivorous birds helped the golden eagles at his hometown zoo in Topeka become the first of their species to reproduce in captivity. When his feline diet was fed to the cheetahs at the San Diego Zoo, he and the zoo were rewarded with the first cheetah cubs born in captivity in the Western Hemisphere. Many more breeding successes have followed.

Zookeepers are not the only ones who Morris thought could use a better grounding in nutrition. "Having graduated from Cornell as a veterinarian and looking around, there were very, very few veterinarians who had any kind of formal training in nutrition," he says. "There really wasn't an academic program where I could get trained in this area. It became obvious that there needed to be some kind of written word that could be used both by veterinary practitioners and by students to learn about the use of diet in the management of disease." Morris provided it in 1983 when he co-authored Small Animal
Keeping Up on the Latest FADs

Fred Kilborne

The student generation is usually hip to the latest trends, but there are some waves that no one wants to catch. Students representing 22 U.S. veterinary colleges gathered at Cornell late in May to learn about foreign animal diseases (FADs) and to think about what they would do if they ever encountered one in clinical practice.

As participants in the Smith-Kilborne Program, the veterinarians-in-training had the opportunity to learn from experts in both academia and state and federal government how to identify diseases whose introduction into this country might have far-reaching and catastrophic consequences, both humane and economic. After three days of lectures and break-out sessions at Cornell, the weeklong course continued with a visit to the Newburgh Animal Import Center in Newburgh, New York, where the students learned about protocols and procedures used for the importation of live animals into the U.S. The course culminated at the Plum Island Animal Disease Center off the tip of Long Island, New York, where the participants were able to observe animals infected with foot-and-mouth disease and learn about the foreign animal disease studies conducted at this high-security research center.

The U.S., Canada, and many other nations work very hard to keep foreign animal diseases foreign. Many of them—like foot-and-mouth disease, exotic Newcastle disease, and classical and African swine fevers—are extremely contagious. Some others—like Rift Valley fever and Nipah virus—pose a dire threat not only to livestock but to humans as well.

In addition to sessions designed to familiarize the students with the diseases that might, if introduced, present the greatest threat to American livestock, the program covered risk assessment, emergency management, biosecurity and animal health, and the importance of animal health in international trade. The students were also asked to consider the humane issues connected with outbreak control and eradication practices. They were told of tragic FAD outbreaks in other countries and their consequences.

An expectation of the course was that the participants would return to their own schools prepared to spread the word about FADs to their fellow students and others. For this purpose they were provided with materials produced by APHIS Veterinary Services and given faculty assistance in preparing their presentations.

The Smith-Kilborne Program is one of only two or three that bring together individuals from every veterinary college in the country. It is named for Theobald Smith, PhB 1881 and Fred Kilborne, BVS 1885, two early graduates of Cornell University and students of James Law, the founding professor and dean of the College of Veterinary Medicine.

Kilborne in 1885 became the fourth student to receive the BVS degree from Cornell. As an employee of the Bureau of Animal Industry (BAI)—the precursor agency to APHIS Veterinary Services that was founded by Cornell's first veterinary graduate, Daniel Salmon—Kilborne demonstrated with Smith that Texas fever was transmitted by ticks, a groundbreaking discovery that opened the way to the control of other insectborne diseases including yellow fever.

Smith, who went on to earn an MD degree rather than a DVM, was one of the pioneers in vaccine therapy and a prominent member of the team that determined the mode of transmission of Texas fever. He discovered serum sickness and collaborated with Salmon at the BAI in isolating organisms belonging to a new genus to be named Salmonella. He also discovered that bovine and human tuberculosis were caused by two separate species of Mycobacterium.
With Respect to Necropsy

Ken Gumaer, DVM '43
Names Laboratory

In the quest to understand disease and save lives, discovery often begins in the necropsy laboratory. Kenneth Gumaer, DVM '43 developed a special appreciation for gross pathology while working in the old Moore Laboratory as a veterinary student. He modestly remembers his duties in necropsy as being mostly janitorial, but the exposure and guidance he received informed and inspired his life's work, both in general veterinary practice and in pathology research at Sterling Winthrop Research Institute. He could have had no finer source of information or inspiration than the man he worked for, Peter Olafson, DVM '26, MS '27. Many regard him as the father of modern veterinary pathology.

Dr. Gumaer recently paid his respects to his mentor and to Cornell's great legacy in anatomic pathology by endowing the Kenneth I. Gumaer, DVM '43 Necropsy Laboratory. The facility was dedicated during Reunion Weekend in June with remarks by Dean Donald Smith and by Professor Emeritus John King, Olafson's successor in the necropsy suite and himself a world-renowned veterinary pathologist. Dr. Gumaer then spoke, recalling not only Olafson but also several contemporaries who went on to prominence in pathology, including the late George Young, DVM '43, the developer of disease-free pigs, for whom a professorial chair is named at the University of Wisconsin, and Cornell faculty members Charles Rickard, DVM '43 and Kenneth McEntee, DVM '44. He also remembered his late classmate George Kiesel, DVM '43, who had worked with him in necropsy. He then acknowledged King, with whom he consulted professionally for many years, and fellow Foremost Benefactor John D. Murray, DVM '39, who endowed the lecture hall where the ceremony was held. Gumaer's gracious remarks were all the more affecting for the keenly felt absence of his wife, Catherine, who died two weeks before the dedication. Dr. and Mrs. Gumaer have supported the College since 1960.

Professor Emeritus Barry Cooper, who was serving as chairman of the pathology department when it merged in 1998 with anatomy and physiology to form the Department of Biomedical Sciences, remembers Ken Gumaer's enthusiasm for pathology with gratitude. "Ken's interest in, and appreciation of, the importance of pathology as a fundamental discipline underlying clinical medicine has been well known for a long time. He has been an important supporter of the College, and I greatly enjoyed the hours I spent in consultation with him," he says.

When Gumaer's mentor Peter Olafson retired as chairman of Pathology and Bacteriology in 1965, it was the largest department in the College. He had built it from literally nothing into an international powerhouse of 20 faculty members, 50 technicians and other staff, and about 20 graduate students. The progress of his department served as a paradigm for the entire specialty of veterinary pathology.

Olafson had come to Ithaca in 1924 to receive the clinical instruction needed to complete a veterinary education begun at North Dakota State College in Fargo. He was drawn to Cornell by the reputation of surgery professor W. L. Williams as an outstanding clinician-teacher. A member of the College's original faculty, Williams had learned pathology from the greatest medical man of his time, Sir William Osler, who was then at Montreal. Williams had retired two years before Olafson's arrival, but, like so many retired professors including Olafson in turn, he came to work every day as though nothing had changed. The two would be associated for many years.

The Department of Pathology and Bacteriology already existed when Olafson arrived at Cornell, but a lack of state funding had left it moribund. The head of the department, bacteriologist Veranus A. Moore, was also dean, but even

continued on next page
Cancer Program Honors Benefactors

What's in a name? For Cornell's Comparative Cancer Program, two newly adopted names signal a notable strengthening of the College's efforts to understand, prevent, and treat cancers of animals and humans.

In a ceremony held September 11, the cancer program itself was reborn as the Isidor I. and Sylvia M. Sprecher Institute for Comparative Cancer Research. Donald F. Smith, dean of the College, Frank H. T. Rhodes, president emeritus of Cornell University, and Professor Rodney Page, director of the Sprecher Institute, presided over the dedication, which Dr. and Mrs. Sprecker traveled from their home in Boynton Beach, Florida to attend. The dedication was followed by a symposium featuring speakers Richard A. Cerione, the Goldwin Smith Professor of Pharmacology and Chemical Biology, and Suzanne Snedeker, senior research associate in the Program on Breast Cancer and Environmental Risk Factors (BCERF). As announced in the last issue of this magazine, the BCERF program moved from the College of Agriculture and Life Sciences to the College of Veterinary Medicine earlier this year to join what is now the Sprecher Institute.

The naming of the Sprecher Institute was made possible by the Spreckers' recent designation of the cancer program as the major beneficiary of a very generous charitable remainder trust that they established at Cornell in 2002. The Spreckers have earmarked the remaining portion of that trust for the support of the Roswell P. Flower – Isidor I. and Sylvia M. Sprecher Library and Learning Resources Center, known informally as the Flower-Sprecher Veterinary Library, which was renamed for them in 1993. The Spreckers, who are Foremost Benefactors of Cornell University, have also funded the Frank and Rosa Rhodes Presidential Scholarships for Veterinary Medicine, the Abraham Joseph Sprecher Scholarships for undergraduates in the College of Agriculture and Life Sciences, and an endowment for the Jewish Studies Program that honors Dr. Sprecker's parents.

Dr. Sprecker, a 1939 DVM graduate of Cornell, practiced veterinary medicine in Waterbury, Connecticut until his retirement in 1977. He changed the spelling of his name while he was a veterinary student in order to clarify its pronunciation. He and his wife have chosen to preserve the original spelling, Sprecher, in naming these key institutions within the College of Veterinary Medicine.

During Reunion Weekend in June, the College formalized the naming of the Jane M. Turrel Radiation Therapy Suite within the Cornell University Hospital for Animals. Dr. Turrel, herself a widely respected and pioneering veterinary radiation oncologist, endowed the College's linear accelerator facility last year. She chose Reunion Weekend for the dedication not because of a personal student affiliation with Cornell — she received her DVM from the University of Illinois in 1970 — but because her parents, John D. and Eloise Clor Turrel, would both be on campus that weekend to celebrate their 60th reunions. Mr. Turrel is a 1943 graduate of the College of Agriculture and Life Sciences; Mrs. Turrel graduated that year from the College of Human Ecology.

Dr. Turrel owns Veterinary Oncology Specialties in Pacifica, California. She is a 1980 diplomate of the American College of Veterinary Radiology, a charter diplomate (1988) in the subspecialty of medical oncology within the American College of Veterinary Internal Medicine, and a 1996 diplomate in the specialty of radiation oncology within the American College of Veterinary Radiology. She has published over 50 articles and book chapters.

With Respect to Necropsy

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so was unable to attract the monies necessary to make a faculty position in pathology pay the rent. For this reason the College lost its only pathology instructor in 1927. Olafson, who had just completed his master's degree in surgery, was offered the position. Having worked the family farm for seven years to help put all of his siblings through college before he was able to go himself, Olafson was evidently accustomed to self-denial. He took the job.

Over the years Olafson greatly distinguished himself in research, especially for his characterization of bovine hyperkeratosis and for the description of the pathology of bovine viral diarrhea, a disease discovered by a rookie ambulatory clinician named Francis Fox, DVM '45. But Olafson built his greatest legacy as a teacher, seeding the pathology departments of most of the veterinary...
nary colleges in North America. Many of Olafson's students went on to great prominence themselves. Notes Sean McDonough, a present assistant professor of pathology, "We expect our trainees to become leaders in the profession."

In parallel to Olafson's efforts at Cornell, a former student of his, Donald Cordy, MS '38, PhD '40, established the other major department of pathology, at the University of California-Davis. Both Olafson and Cordy helped found the American College of Veterinary Pathology (ACVP), which in 1948 became the first specialty board of the American Veterinary Medical Association. Olafson served on the original board of examiners, and veterinary pathology became a formally taught discipline.

Despite the prestige associated with directing a large number of graduate students, Olafson felt that he could only do justice to one at a time. He did them justice and then some. His very select and devoted band of protégés became pathology department chairmen (and one chairwoman), veterinary deans, presidents of the ACVP, and authors of major textbooks.

Cornell's pathology section has maintained its stature as an exceptional training ground in the years since Olafson's retirement. The residency program is thriving, according to McDonough, successfully attracting the pick of the top candidates. Filling faculty positions, however, has been a struggle in recent years, and building up the section of pathology has been a department priority for some time. More and more pathologists have turned to industry, eschewing the demands and lower salaries of academia, but McDonough predicts a turnaround as some in industry realize that they would rather do independent research, teach, and interact more with veterinary clinicians. For Ana Alcaraz, a lecturer in pathology, the benefits of an academic position are very clear: "Any other job would focus my training on teaching, or service, or research. Here I can have the three of them. It's very fulfilling. Researchers want to involve me in their research. The students are very committed to being veterinarians, and some of them are very sharp. It's always nice to have their questions. Working with the residents is also very fulfilling, because they are trained veterinarians who are very enthusiastic about learning a field that I love."

The availability of increasingly sophisticated molecular methods in biomedical research during the past two decades has led some to question the continued relevance of anatomic pathology, which relies to a great extent on the same technology — slides stained with hematoxylin and eosin — used since the late nineteenth century to analyze the architecture of diseased tissues. Pundits have predicted that all studies of disease would be conducted at the molecular level. It hasn't worked out that way, though, says McDonough. "The problem with molecular studies is that they are out of context with what is happening in the animal," he explains. "There are many, many things that you can study at the molecular level that have absolutely nothing to do with why a particular animal is sick. Every time that people claim that the discipline is going to die, it turns out that we need more pathologists than ever."

Although pathology is often associated with postmortem studies, Cornell's pathologists are also very much involved in diagnosing the afflictions of patients under treatment in the Cornell University Hospital for Animals and elsewhere. Under the leadership of Professor Brian Summers, a well respected neuropathologist and head of the surgical pathology service, the pathology team have begun taking their work into the hospital in an effort to encourage interaction with the clinicians who use their services. For an hour each day they meet with residents, clinical faculty, and students to read their patients' biopsy slides together and discuss the cases in depth. Thanks to a special video-equipped microscope purchased with funds from an anonymous gift, everyone can view the slides simultaneously on a large monitor.

"The advantages are multiple," says Summers. "The clinician gets to hear the diagnosis as it is made. It allows the clinician to ask the pathologist questions about the diagnosis that might not be discussed in the report. It allows the pathologist to ask the clinician for clarification of the case history. More importantly, it allows the senior students to see the interaction between the clinician and the pathologist and gets them to think about pathology as a career option. Most students' only exposure to pathology is on the postmortem service, so it's my thesis that most veterinary students equate pathology with failure, with patients that have died. Surgical pathology deals with the living, and pathologists contribute significantly to decisions regarding patient management."

Anatomic pathologists, the disease detectives of veterinary and human medicine, know that studying the clinical "failures" can be the key to saving many more lives. "Clinicians become doctors to save and cure patients," says Alcaraz. "They prove that they are very good by understanding disease. And what is disease? Pathology. In my opinion, the study of pathology is the core, the soul of medicine." Ken Gumaer knows exactly what she means. As he told his audience during the dedication in June, "I hope this gift will preserve the necropsy laboratory's significance and keep 'Show and Tell' on the active agenda."
CVM Alumni Reach Out

When this year's crop of first-year students arrived in August for orientation, a representative of the College's Alumni Association was there to answer their questions, hand them an official Alumni Association highlighter, and lead them in a few rounds of the Alma Mater. When those students enter clinical rotations in two and a half years, the white coat they wear will have come courtesy of the Alumni Association, which two years ago began conferring them in a December ceremony.

At commencement, the alumni will be there again to welcome the new graduates into the profession with a year's free membership in the association.

The activities of the Alumni Association extend beyond ceremonies or social events, however. A key purpose of the organization, according to current president Roger Ellis, DVM '77, is to keep the graduates of the College in touch with their school and to ensure that the knowledge and skills gained through veterinary education, practice, and service are passed from one generation of Cornellians to the next. "The College of Veterinary Medicine at Cornell has a rich heritage of alumni who have made and continue to make major contributions daily to animal and human health and well-being," says Ellis.

One of the most direct ways in which the association encourages interaction between alumni and students is through VALSEP — the Veterinary Alumni Student Employment Program. VALSEP provides awards to selected students who accept summer employment in alumni practices. "It's a great way for the students to network with alumni. If you're an alumnus, it's a great way to get to know the students who are coming through," says Carol Gary, director of veterinary student financial planning at the College.

Awardees are selected according to a lottery from among the eligible applicants. Depending on the number of grants made and the funds available, the Alumni Association may match up to $1,500 of the salary paid to a student. "If a student is weighing job offers from more than one practicing veterinarian, a VALSEP grant can tip the balance in favor of the alumni practice," notes Gary.

This year's grants funded seven students with awards of up to $750. Recipients were Dava Cazzolli, Elaine Fan, Christine Miyasaki, Beth Pellegrini, and Kelly Still from the Class of 2005 and Catherine Reiss and Vanessa Philson from the Class of 2006. According to Alumni Association secretary Pepi Leids, DVM '82, the association elected to reduce the amount of the awards this year in order to assist more students.

Alumni Association dues also help support a variety of student organizations. This year they provided a total of $4,550 to nine groups: the Veterinary Economics Group, the Veterinary Players, the Special Species Symposium, Phi Zeta, Felis Medicus, and the student chapters of the American Association of Bovine Practitioners, the American Veterinary Medical Association, Veterinarians in Developing Areas (VIDA), and the American Association of Ruminant Practitioners. The Alumni Association also supports the student-run open house held every April at the College and contributes books to the Flower-Sprecher Veterinary Library as memorials to deceased alumni.

The Alumni Association gives its members a unified voice on issues of importance to them and to the College, says Ellis. There is opportunity during every meeting of the association's executive committee to exchange views and information with Dean Donald Smith or another official of the College.

At present, a little more than 25 percent of veterinary alumni — 918 members — belong to the association, according to Tracey Brant, the College's director of alumni affairs and liaison to the association. Ellis would like to see that number increase. "This is our veterinary college, where we were given the education we wanted and needed," he says. "The students today are just like we were — dedicated, overwhelmed, and wanting to be the best veterinarians they can possibly be. It is our responsibility to offer them the best mentoring we can."

"My thanks to the dedicated members who make the Alumni Association possible," he continues. "For those who are not dues-paying members, please consider joining our team. The cost is low and the rewards are fantastic."
Erla P. Heyns, MLS, PhD, director of the Flower-Sprecher Veterinary Library, has been selected as a recipient of the State University of New York Chancellor’s Award for Excellence in Librarianship for the 2002–2003 academic year. In supporting her nomination, Dean Donald Smith wrote, “Dr. Heyns has strengthened instruction, computing, and public-affairs programs within the library and introduced electronic reserves, archival support, and digital video production. She brings tremendous vision, commitment, and energy to all projects in which she is involved.” The Flower-Sprecher Library is the oldest veterinary library in the U.S. and contains one of the largest and finest collections of its kind in the world.

Benjamin Lucio-Martinez, DVM, MS, PhD, a senior extension associate in the Department of Population Medicine

Gilmour named research dean

Robert F. Gilmour, Jr., PhD, a professor of physiology, became the College’s associate dean for research and graduate education on July 1. He replaces David G. Russell, PhD, chairman of the Department of Microbiology and Immunology, who ably filled in as interim associate dean following the retirement of Douglas D. McGregor, MD, DPhil. McGregor, a professor of immunology and former director of the Baker Institute for Animal Health, had served in the post since 1991.

As associate dean, Gilmour is responsible for the administration of a research enterprise funded by more than $30 million in grants, half of which come from the National Institutes of Health. He also oversees the College’s graduate programs, currently home to approximately 100 doctoral and 10 master’s degree students, and the combined DVM/PhD program.

Gilmour will also continue his own NIH-funded investigations of electrophysiological mechanisms that may give rise to cardiac rhythm disturbances. He did his graduate work in pharmacology at SUNY Upstate Medical Center.

Christopher J. Murphy, DVM ’83, a professor in the Department of Surgical Sciences at the University of Wisconsin–Madison, was honored at the annual meeting of the American Veterinary Medical Association with the American Veterinary Medical Association Career Achievement Award in Canine Research. Murphy, a diplomate of the American College of Veterinary Ophthalmologists, showed that nearsightedness is common in certain dog breeds. He also

For the third time since 1983, the members of the fourth-year DVM class have chosen Wayne S. Schwark, DVM, MSc, PhD, a professor of pharmacology, to receive the Norden Distinguished Teacher Award. The presentation was made during the Honor Day ceremony in May. Schwark serves as a tutor, laboratory instructor, and lecturer in blocks III, IV, and V of the veterinary foundation curriculum and teaches distribution courses in antimicrobial therapy and clinical pharmacology. He also teaches several graduate courses in pharmacology. His research is focused on establishing a rational basis for the use of drugs in veterinary patients. Schwark earned a DVM and an MSc in pharmacology at the University of Guelph and a PhD in pharmacology at the University of Ottawa.

Gilmour

Heyns

Murphy

Schwark

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ed the Veterinary Services Division of
the USDA's Animal and Plant Health
Inspection Service (APHIS). Torres
joined the Cornell faculty last year as
associate dean for veterinary public
policy and director of the Animal
Health Diagnostic Laboratory. The pro-
gram will return to Cornell next year.

Other faculty for this year's course
included Corrie Brown from the Uni-
versity of Georgia, Gale Wagner from
Texas A&M University, Cristobal Zepe-
da from Colorado State University, and
Bruce Akey from the New York State
Department of Agriculture and Mar-
kets. The instructors reminded the stu-
dents that the first case of a FAD might
well be seen by a small-animal practi-
tioner. "Don't just think livestock," Torres
said. "Imagine a SARS-like coronavirus
outbreak in cats..." The students were also
reminded that exotic Newcastle disease
affects pet birds as surely as it does poul-
try and that a pot-bellied pig is suscep-
tible to the many diseases that can infect
their full-size cousins on the farm. Some
owners take such pets on their travels to
exotic locales where disease transmis-
sion is a real possibility.

established that spontaneous chronic
corneal epithelial defect is associated
with the underlying connective tissue,
rather than the epithelium, of the cor-
nea and developed an effective topical
treatment for the disease. He holds two
patents in topical stimulation of wound
healing. In addition to
his faculty post, Murphy
is an affiliate professor in
the departments of Bio-
medical Engineering
and Ophthalmology of
Wisconsin's School of
Medicine and an ocular
toxicity consultant to
Genentech and Eli Lilly.
He also consults for the
Milwaukee County Zoo.

James F. Peddie, DVM '65 of Ventura,
California has been named a Distinguis-
ished Life Member of the California
Veterinary Medical Association. Now
chairman of the Department of Exotic
Animal Training and Management at
Moorpark College, Peddie was for 23
years part-owner, chief of sur-
gery, and business manager of
Conejo Valley Veterinary
Clinic and co-owner with his
wife and classmate, Linda
Reeve, DVM '65, of a prac-
tice catering to animals
working in motion pictures
and television. Peddie has
been treasurer of the AVMA
since 1999 and has held
many posts in the CVMA.

CLAude Johnson to head AA&D

Claude M. Johnson, MBA has been appointed as
the College's assistant dean for alumni affairs
and development, effective October 15. As a
partner in Terry & Associates, a Brooklyn, New
York management consulting firm specializing
in the arts, Johnson has worked with such major
institutional clients as the Chicago Symphony Orches-
tra and the Rockefeller Foundation. After receiving
his MBA from the University of California, Los Ange-
les in 1983, he remained at the university for several
years as associate director of development for the
College of Fine Arts. He has also consulted with the Dance Theatre of Harlem.
endnote

"R
emember to tell the students that this is the golden age of veterinary medicine." With that parting ad
monition, Dr. Isidor Sprecker boarded the plane home to Florida with his wife, Sylvia, the day after the inaugura
tion of the Sprecher Institute for Comparative Cancer Research. Dr. Sprecker, who graduated in 1939, has enough his
tory behind him to appreciate fully how far we have come as a college and as a profession.

At the College faculty meeting earlier in September, Cornell’s new president, Jeffrey Lehman, noted that the University will celebrate its sesquicen
tennial in 2015. As we carry our mission forward to that milestone and beyond, he urged us to keep in mind the ideals and accomplishments that have gotten us this far.

These two appeals are juxtaposed against a simple question put to me re
cently by two first-year students. Why, they wanted to know, is Cornell ranked number one in veterinary medicine? What is it that distinguishes our college from the rest?

It is a fair question, to be sure, and one that those of us affiliated with Cornell should be prepared to answer with clarity and precision. I would like to propose seven reasons why I think Cornell is worthy of premier ranking.

First is the quality and breadth of our students, whose enthusiasm for attending Cornell is so often summed up in the same simple statement: "The day I got my letter of acceptance from Cornell was the best day of my life!"

Secondly, we have a superb faculty working in partnership with a dedicated, creative, and diligent staff. The excellence and eminence of our faculty scholars are matched by their commitment to education. We seek a balance in our faculty profile between those who are clinician-scientists and those who are experimental biologists, and we place high institutional value on promoting synergy and harmony between these domains.

Third, we belong to a great research university. Cornell was founded upon the notion that the applied sciences deserved equal status with the liberal arts. Ezra Cornell’s concept of founding a university where all subjects could be studied by all students was revolutionary in the mid-nineteenth century. It spawned a university with strengths not only in the liberal arts but in the physical sciences, mathematics, and engineering as well as in biology and medicine. Both the educational and research programs of the College of Veterinary Medicine are reinforced and invigorated by our proximity to world-class scholars who mine the entire spectrum of scientific inquiry.

Fourth is the College’s infrastructure. Not only are we blessed with a superior, state-supported physical plant, but all of our educational programs are located on a single campus. Within one common footprint, our students and faculty have access to all of our teaching and clinical facilities, the majority of our research laboratories, and our outreach activities.

Fifth, we have a legacy that has been established over the course of 135 years by the professional and societal contributions of more than 5,000 graduates. Our alumni have provided leadership for advances across the broad range of fields of animal health, public health, and the biomedical sciences. Their lives and careers have had enormous impact on society, and their continued allegiance makes them a defining force for Cornell.

Our sixth distinguishing trait – and it is a vitally important one – is the remarkable generosity of our friends and alumni. Private contributions could once be applied to achieving an extra margin of excellence. We now depend on private giving to offset continued reductions in public funding while expanding our educational and clinical programs as we must in order to fulfill our mission in research, clinical service, and teaching.

Seventh, we embrace our responsibilities to society. Veterinary institutions that value research as well as education have a special role in the advancement of animal and human health. When these are accompanied by outreach to the veterinary community and the public, we are able to inform public policy as well as have a direct impact on the lives of individual citizens.

As we look forward to marking this university’s 150th anniversary, we must ask ourselves whether the future of veterinary medicine at Cornell will be as prominent as its past. We must continually recommit ourselves to validating the belief of Dr. Sprecker, who, while recognizing the greatness of our legacy, has the vision to suggest that the best is yet to come.

Dean of the College
2004

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ON OUR COVER: We had the good fortune to photograph Ann Dwyer, DVM '83 on the day that she went to see Bundle, a 31-year-old Connemara owned by Debbie Davis of Pittsford, New York. Davis learned to ride on Bundle when he was three and she was a young girl in England. She rode him to six consecutive national championships in the early 1980s; in their 136 competitions, Bundle took 133 firsts and three seconds. Bundle, who is quite delightful and enjoys good health, is still famous in England. He financed Davis's entire college education by appearing in Heineken beer commercials. COVER PHOTO BY DEDE HATCH.
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