eVETS August 2017: Alumni Highlights

Congratulations to our co-recipients of the 2017 Salmon Award for Distinguished Alumni Service!

A forward-thinker: Donald Lein DVM ’57

The curious clinician: Ann Dwyer DVM ’83
Donald Lein DVM '57 is what you might call an influencer—the emeritus professor of population medicine and diagnostic sciences played an integral role in building the Animal Health Diagnostic Center into what it is today; he conducted seminal research in small animal reproduction and cattle infectious disease and herd biocontainment practices; he pushed through key policies to improve livestock and wildlife population health. With so many accomplishments to his name, it’s fitting that Lein is the 2017 co-recipient of the Cornell University College of Veterinary Medicine’s Salmon Award for Distinguished Alumni Service. “Don has an absolute interest in animal health and welfare,” says Dr. Ed Dubovi, professor of virology and former colleague. “He not only promoted the diagnostic laboratory, but was also an active member of the veterinary college—he was a good citizen.”

Lein first came to Cornell as a pre-veterinary student within the College of Agriculture and Life Sciences; he went immediately to the veterinary college as part of the Class of 1957. He would later go on to receive a PhD in pathology from the University of Connecticut, and settle back at Cornell to become a professor of pathology and theriogenology, chair of the Department of Population Medicine and Diagnostic Sciences, and director of the Animal Health Diagnostic Center. During his long career at the College he would also take leadership roles at a number of national organizations, including the National Institute of Animal Agriculture, the Council on Public Health and Regulatory Medicine of AVMA, the Wildlife Services Committee at the USDA, and served as president of both the American Association of Veterinary Diagnostic Laboratories (AAVLD) and the United States Animal Health Association (USAHA). “My wife says I turned from a researcher to a politician,” Lein laughs.

Animal aptitude

Lein has animal husbandry and health in his blood—descended from four generations of cattle dealers, and growing up on his family’s dairy and livestock farm in Lancaster N.Y., he and his six siblings helped to manage the family’s cattle and horses. At Cornell, Lein was in the last veterinary class at Cornell to study in the old buildings located at what is now the School of Industrial Labor Relations. “Often we would do large animal surgery out on the hillside next to Barton Hall,” Lein recalls. To help pay the bills, Lein relied on his musical abilities, performing piano in a Dixieland band at fraternity functions and local parades. Once graduated, his time to play music dwindled as he threw himself into the rigors of a mixed animal private practice with another Cornell graduate Dr. Cleon “Slim” Easton ‘51. “When it was just the two of us it was frequently overwhelming,” says Lein, “but it was also fun, I really enjoyed private practice.”

Lein returned to the College again in 1965 as a research assistant for reproductive pathologist Dr. Kenneth McEntee ‘44, working primarily at the New York state bull stud (formerly located on Pine Tree Road) to discover a way to mitigate a type of bovine STD known as vibriosis. The disease was notoriously contagious—while bulls could be treated with antibiotics, new bulls brought into the stud would routinely re-infect the herd. Lein solved the problem from a systems approach—designing a biocontainment system in which treated bulls, and all equipment around them, were kept separate from untreated bulls. The elegant solution was then adopted by state bull studs across the country.

Eventually, Lein decided to pursue a PhD in pathology at the University of Connecticut—an experience that answered Lein’s clear love of learning. “I enjoyed my PhD degree so much—I got to work there learning pathology with really great people,” says Lein. “I could have been a student for the rest of my life.” Nevertheless, he eventually returned to Cornell in 1974 after getting a phone call from his old mentor Dr. Francis H. Fox ‘45: “We need you to come back at Cornell,” his former professor had said, asking him to sign on as an associate professor of theriogenology with a joint appointment in pathology. Lein agreed, and jumped into a diverse range of projects;
first, he broadened the theriogenology program to study cats and dogs: “We were some of the first people to really develop small animal theriogenology,” Lein recalls. He also worked on the large animal side—helping to establish the first east coast contagious equine metritis quarantine facility at the Cornell Equine Park with Dr. Jack Lowe ’59.

Building influence

In 1980, Lein became the assistant director of the Diagnostic Lab (now the Animal Health Diagnostic Center or AHDC), and the director in 1987. “That position brought me back to the work I did during my PhD,” says Lein. It also sparked inspiration in him to build up the Lab’s service and outreach in its newly-contracted role as New York State’s designated animal diagnostic lab. “I saw a place where we could have quite a bit of influence at the state or even national level.” Thus, Lein spearheaded several new initiatives—he ensured that the lab became accredited by the AAVLD, began a small and large animal endocrinology lab, and united several diagnostic services, including clinical pathology, comparative coagulation laboratory, microbiology and pathology under the AHDC umbrella. “But to truly maximize what’s done in a diagnostic lab, you need to also educate the farmers and practitioners too,” says Lein. Thus, he began building up the outreach component of the Center, enlisting clinical experts in production and companion animal medicine to get involved in the AHDC’s mission of education and outreach. The AHDC also became truly translational—thanks to Lein coordinating the expertise of the faculty and staff to offer application, diagnostic service, and outreach to the users.

Lein spearheaded the upgrading and the improvement of the mastitis prevention program, and served as administrative director of the Quality Milk Production Program. He also helped develop, with New York State Veterinarian Dr. John Huntley ’80, the New York State Cattle Health Assurance Program (NYSCHAP), a farm health risk management program that initially aimed to tackle three major cattle diseases—bluetongue, bovine leucosis, and Johne’s disease—but grew into an overall systems approach to maintaining cattle health. “It looked at all diseases, the environment, and biocontainment,” says Lein. “This became a model that’s become common across the state and even the country, enlisting the producer, practitioner, diagnostic laboratory, and the state.” “It was a very forward-thinking program,” Dubovi says.

A visionary veterinarian

Lein was also forward-thinking when it came to another major animal health issue—rabies. He was the primary champion of a unified, multi-state campaign to block the spread of raccoon rabies through the northeastern United States and eastern Canada. “Don, with the skillful help of his colleague, Dr. Laura Bigler, was instrumental in establishing the agreements with the United States Department of Agriculture (USDA) and Canadian groups to stop the spread of that disease,” says Dubovi. “He lobbied hard, and continues to lobby hard to make sure the USDA had money for the program. From my perspective, he’s the one who kept driving that ship. It’s been a truly amazing effort.” Not only did Lein use his political and interpersonal skills to ensure the program was possible, he also worked directly with Merial, a multinational animal health company, to develop best strategies for deployment of the vaccine into wild populations. When asked for an achievement he’s proudest of, Lein mentions this work in rabies prevention as a particular point of pride.

Having seen veterinary diagnostics transform over the decades, Lein hopes to see it become even more sophisticated in the near and mid-term future. “The next venture for the field is molecular and genetic medicine diagnostics,” he says. “We’re going to add to our physical diagnostics and have already moved towards looking at the molecular and genetic markers for diseases. You see this happening already in veterinary and human medicine. We’re becoming more sophisticated in our abilities to select against conditions and prevent diseases, and we should continue to invest in these new technologies.”

This brand of long-term vision and dogged determination is what helped make the AHDC, the College, and the health of New York state’s wildlife and livestock what it is today. “I’ve always had the ability to see things for what they could be,” says Lein. “I could see their potential.”
The curious clinician: Ann Dwyer DVM '83

If you ask Ann Dwyer DVM '83, the co-recipient of the Cornell University College of Veterinary Medicine's 2017 Salmon Award for Distinguished Alumni Service, the key to her career, she might answer: "SOAP." No, not the stuff that lathers up your hands—but the Cornell-taught approach to problems: Subjective and Objective observations, turning those into an Assessment, then creating a Plan. "Cornell trains all graduates to do this kind of analysis. In reflecting back on my career, all I have done is “SOAP” many facets of being a professional," says Dwyer. "That method applies to patients, of course, but also to things like doing research, making a speech, leading an organization, assembling a course or designing a building. This SOAP approach to life is one that I see Cornell colleagues—teachers, administrators, classmates, students and fellow graduates carry out over and over again throughout their careers. Mine is no different."

Dwyer is currently the co-owner of the Genesee Valley Equine Clinic in Scottsville, N.Y. and is known for her expertise in equine eye diseases, currently serving as a reviewer for Equine Veterinary Ophthalmology and has authored a number of papers and book chapters on equine ophthalmology. She received a BS in biology from Mount Holyoke College in 1975 and her DVM from the College in 1983. Dwyer is a member of the AVMA, AAEP (serving as president of that organization in 2013), NYSVMS, IEOC, the Zweig Committee, and serves as vice-chair of the College's Advisory Council.

For Dwyer, there is “no such thing as a typical day,” in her life as an equine veterinarian and practice owner. “Some days I see herds of horses, some days I see just a few patients,” she explains. “Some days I concentrate on patient care; other days I put on my practice-owner hat and tend to taxes and budget. Some days I am away from the practice, teaching vet students or doing work for AAEP. Some days I seem to do a combination of all of the above activities and am up late at night tending to email.”

Equine interests

A love of horses has been a constant throughout Dwyer’s life, from taking riding lesson from her fifth grade teacher, eventing as a teen, and teaching lessons herself while a college student at Mount Holyoke. Horses played a key role in Dwyer’s self-described “tipping point” towards veterinary school—when she spent three years working at various east coast Thoroughbred racetracks as a hot walker, groom, and eventually an exercise rider. “By the time I finished my admittedly crazy, somewhat wild “adventure” on the track, I decided to throw my hat in the ring and apply to Cornell,” Dwyer says. “I clearly remember typing up my application on a NON-electric typewriter in the tack room of the racing stable at Hialeah in Miami! When I sealed the envelope I think there was hay chaff inside it. To my surprise I got an interview and was accepted for the Fall of 1979.”

At the College, Dwyer sunk her teeth into what would become her favorite courses--such as gross anatomy taught by Drs. Howard Evans (CALS '44, PhD '50), Alexander deLahunta (DVM '58, PhD '63), Wolfgang Sack and John Cummings (CALS '58, DVM '62, PhD '66) -- relishing the experience of sitting in lectures given by professors who “wrote the textbooks,” and the camaraderie in the clinics. “All the faculty seemed to be friends and colleagues, not competitors, and they treated the students like the budding clinicians we all were,” she recalls. “It was a real team feeling, quite a unique professional environment. I think it set an example for me of how things should be when a group of people come together to solve problems and help animals.”

Eying ophthalmology

When she graduated Cornell, Dwyer’s parents and friends pooled their resources to buy her a direct ophthalmoscope as a graduation present. "Once I had a scope I figured I better learn how to use it, so I started looking at every horse I saw," she says. While she briefly considered pursuing specialty training in ophthalmology, "my gut told me that there was a place in the world for a general equine practitioner who had a special interest in ophthalmology. In looking at the sparse clinical literature that was available 30 years ago, my SOAP approach told me there was a need for more information on clinical problems in populations, and for relating eye problems in horses to equine health in general. So I decided to stay put in practice, but pursue every available opportunity to train in ophthalmology."

And pursue she did—even attending monthly Ophthalmology Grand Rounds at the University of Rochester Medical Center—something she continues to this day, along with serving on the Advisory Board of the Flaum Eye Institute at the University of Rochester. Dwyer also began to travel to universities in search of more ophthalmology training, spending time at University of Florida and North Carolina State, observing cases and participating in rounds.

**Staying curious**

This depth of knowledge around equine ophthalmology, and the breadth of experience that veterinary medicine lends, has given Dwyer the kind of career that keeps her engaged. "Years ago I worked on an assembly line to earn money during a college summer break," she recalls. "Pretty much every day was the same. I would report for work at the appointed hour, sit down at a table and assemble traffic safety devices (blinking lanterns) ... That experience taught me to appreciate the variety and the challenge that every day brings when you become a veterinarian!"

Beyond the daily excitement that veterinary medicine has given Dwyer, she points out how a Cornell-taught foundation in the field has truly set her up for a life of practical perseverance. "There is something unique about the Cornell experience that I call the ‘roll up your sleeves and get it done’ approach," she says. "It is eminently practical. Kind of a ‘head in the clouds but boots on the ground’ attitude. I have observed it throughout the university, not just in the veterinary school. To me, Cornell represents a center of excellence that keeps the focus relevant to practical problems of the world."

As Dwyer continues to manage her successful practice "one stall at a time," she’s mindful of the foundation of meaning and mentorship she received at the College. "The value of having a Cornell education is that you have been given an example of mentors who are truly excellent in their respective fields but are still humble and plain spoken. They teach you to ‘be in the world’ and to stay curious, but to always be grateful at the same time."