Dean Buss–taking it all to heart

Serendipity has a lot to do with my career,” said Daryl Buss, dean and professor at the University of Wisconsin School of Veterinary Medicine. And the smile on his face while telling his story indicates there were many pleasant surprises. Those surprises didn’t come without fortitude and academic accomplishments that opened doors—and fortunately, Buss was adventurous enough to walk through them.

When Buss was six-years old, his family moved from Rock Rapids, Iowa to Rushmore, Minnesota. While a state away, the move was only twenty miles. His father purchased a diversified, 160-acre farm, which had most everything but sheep. “I assisted with all chores, even when small,” said Buss. “We were only limited by our physical size. When I was young, I carried water from the pump to the kitchen for cooking and cleaning. We weren’t electric until I was in high school.”

No electricity was not uncommon for rural Minnesota, as was the one-room country schoolhouse Buss attended through the 8th grade. The trip to high school was long and didn’t allow for any extracurricular activities. “I didn’t give the future much thought until I was a junior in high school. I had an inherent assumption I would farm. It was what everyone did.”

Many high school teachers then didn’t give rural kids much thought either. “Some teachers felt that the rural kids were somehow less able,” said Buss. But what the rural kids did learn went beyond books and helped Buss in his career as much as academic learning. “We learned to amuse ourselves,” said Buss. “In a one-room school, it was expected that the older kids look after the younger kids. And there were usually enough of us to organize some sort of sport. No one was organizing for you, you had to learn to get along, compromise, motivate—a lot of interpersonal skills you didn’t realize you were learning.”

A high school agriculture instructor noticed these skills and a bright mind in Buss, and pulled him aside and said, “You have the ability to go to college. You need to put forth more effort to reach your goals.” Buss took these words to heart. Few people in those days felt that college was achievable. But when Buss thought about his future, he thought of people he admired and their country veterinarian came to the top of his list. “I was impressed with the veterinarians that served our farm,” said Buss. “They were held in high regard by my father and the farm community. It looked like a pretty good thing to which to aspire.”

Buss took most of his college prerequisite classes at the local community college in Worthington, Minnesota. Afterwards he applied and was accepted into the veterinary medical school at the University of Minnesota. “I entered school without thinking through what I would do. Today there is a whole menu of options for a veterinarian. At that time, there were no electives, everyone did the same thing.”

Halfway through his education, Buss focused more on companion animals. After graduation, he applied for an internship at the Animal Medical Center (AMC) in New York City. He and his new wife Sharon packed up her Studebaker and headed for the Big Apple. Sharon had grown up on the farm that backed up to the Busses’, and both were open to a continued on page 3
Can the Bulldog Be Saved?

The Bulldog is notorious for health problems, yet the breed is loved across the country. Benoit Denizet-Lewis wrote an in-depth article for the New York Times Magazine on the plight of this breed. One of his sources was Sandra Sawchuck, chief of primary care services at the UW School of Veterinary Medicine. Denizet-Lewis flew to Madison to meet with Sawchuck and her two Bulldogs. If you would like to read the full story, you can find it at: http://www.nytimes.com/2011/11/27/magazine/can-the-bulldog-be-saved.html

A world-class cow experience

“No one will ever have a reason to complain about the way I fill out health papers after I get out of school,” said Chelsea Crawford, first year student at the UW School of Veterinary Medicine (SVM). Crawford was referring to health papers necessary to transport a cow to the World Dairy Expo. She was one of 60 students participating in a program established by Dr. Sheila McGuirk, professor of Large Animal Medicine and Food Animal Production Medicine at the SVM, to help the Expo check in over 2,000 show cows coming to Madison.

World Dairy Expo management wanted to improve its biosecurity, but they recognized they would need assistance beyond what was available from the Department of Agriculture, Trade and Consumer Protection’s (DATCP) veterinarians, the group typically assigned to monitoring health requirements of arriving cattle. The goal was to have every cow checked before it got off the truck or trailer that it arrived in. But these cattle would be arriving continuously over a period of 52 hours from all over North America. Cattle that have been on a trailer for long periods of time, need to be unloaded, milked and bedded down in straw as soon as possible after arrival. Any obstacle to an efficient unloading process would be a problem.

Mark Clark, manager for the World Dairy Expo, and Bob Kaiser, the dairy cattle superintendent, asked Dr. McGuirk for ideas about how to address this issue. She created a one-credit class continued on page 7
big city adventure. A registered nurse, Sharon found a job in a hospital while Buss started his rotating small animal internship.

It was at AMC that Buss began to develop an interest that would change the direction of his career. “Steve Ettinger was the chief of cardiology for the AMC at the time, one of the early figures in clinical cardiology, and I participated in every case I could and hung out in the heart lab, not just because I was interested in it, but because I thought it was a weakness of mine,” said Buss. “I thought I could strengthen that by absorbing as much as I could.”

It may have been nothing more than interest at the time, but Buss took his new knowledge and became an associate at a veterinary practice in White Bear Lake, Minnesota. His daughter Jennifer was born there, but rather than settle down, Buss soon realized he belonged in academic veterinary medicine. He became an instructor in small animal internal medicine at the University of Minnesota while considering future options. His interest in cardiology continued to grow and he knew of two university programs that could move his career forward—The Ohio State University and the University of Pennsylvania.

Again, the Busses packed their bags and headed across country to Philadelphia for a training program. When his program ended, Buss felt comfortable with his background in clinical cardiology, but weak in cardiovascular physiology. “Faculty at the University of Pennsylvania made me aware of a program in Veterinary Science at the UW–Madison. The Wisconsin department had a terrific reputation, so I applied for a graduate position,” said Buss.

Packing their bags again, the Busses were on the road to Madison. Although officially a graduate student in Veterinary Science, Buss’s support came through the Medical School. “Collaboration was the norm,” said Buss. “I worked with George Rowe, Chief of Cardiology at the School of Medicine, who was a pioneer in coronary catheterization. My first six months were in a cath lab in the human hospital. My interest in the heart created an interest in coronary disease and coronary physiology.”

This intensive experience gave Buss a background in coronary disease that he couldn’t get any other way. He was also able to work with Professors Jim Will and Gerald Bisgard, two more well-known names in cardiovascular physiology. “Graduate school was terrific,” said Buss. “I had a broader range of experience and I got paid to read research papers and do experiments. How could it get better?”

About this same time, government funding was undergoing a budget crisis and NIH training grants were slashed. “I shifted gears and completed my PhD in a little over three years,” said Buss. While conducting research at UW–Madison’s Charmany Farm, he saw his next door of opportunity. Dr. George Rowe brought over Dr. Wolfgang Schaper, the director of the Max Planck Institute for Physiological and Clinical Research in Bad Nauheim. “Over 30 minutes and a cup of coffee, Wolfgang wondered if I had interest in researching in Germany. Sharon and I always wanted to live in Europe, so off we went. It was a terrific experience... Dr. Schaper wrote the book on collateral circulation in the heart.”

“At the time, people thought heart disease was an illness of males in their mid–50s and 60s. We learned from Vietnam autopsies that there were young soldiers with significant heart disease. But something we didn’t expect were occluded coronary arteries and collaterals. What about these? How did they form? That was Schaper’s area of focus.”

Only blocks away from Buss’s work was the Kerckhoff Klinik, a center for heart and lung diseases. The proximity of the clinic offered Buss many opportunities to participate in animal-human medicine collaborations. The year passed quickly and Buss soon had to make a decision about whether to stay or to go through the next door.

Both he and Sharon loved Germany and its people, but their daughter Jennifer was scheduled to start school and Buss needed more than a post-doc’s salary to support his family. So he applied for positions at five different veterinary medical schools in the
BUSS continued

United States. All five schools responded and each one was prepared to fly him back to the U.S. for interviews. Rather than have one school pay for his entire trip, Buss, an experienced collaborator, informed each school of his pending interviews and suggested they each pay one fifth of his expenses. “They graciously agreed as I did not want to stiff any one school for the entire bill,” said Buss.

The last school on his interview schedule, but initially low on his list of probabilities, was the University of Florida. Neither he nor Sharon had been further south than Pennsylvania. “It was way more interesting than I anticipated,” said Buss. “At the time, the medical school had just recruited their chief of cardiology from Johns Hopkins and he knew Wolfgang Schaper well. He was interested in me and offered a joint appointment with the medical school. Having a close working relationship with a medical school was important to me.”

The year was 1976 and Florida was just breaking ground for its new College of Veterinary Medicine. There were no buildings and faculty recruitment was ongoing. “Charles Cornelius, the founding dean of the veterinary medical school, saw many opportunities when looking for faculty,” said Buss. “He was interested in people strong in research who could do clinical medicine as well. I was hired as an associate professor in the Department of Medical Sciences and the Chief of the Cardiopulmonary service. I was expected to have a funded research program.”

After two years at Florida, Buss was asked to head a search committee for the chair of the Physiological Sciences Department (known then as the Department of Metabolism). While several outstanding candidates were identified, the college was not satisfied and the search process stalled.

Soon after, Dean Cornelius asked to see Buss in his office. Buss had already planned a speech to explain why he was not in a position to lead another search, when Cornelius stopped his explanation short and suggested that Buss fill the role of chair. “But I’m too young for this position,” Buss said. “Forget that,” said Cornelius. “I was a dean by your age.”

“Sharon and I took a long weekend to think about it,” said Buss “And I became chair with the view that it was short term.” Buss held the position for 15 years.

During this time, several schools attempted to recruit Buss for dean positions, including Madison. “I declined to be a candidate,” said Buss. “There is a bond among faculty when you build a school from the ground floor. It is a special bond between people who go through this experience.” But Madison wouldn’t give up and Jerry Bisgard, his former mentor and then professor and chair of the Department of Comparative Biosciences at the UW School of Veterinary Medicine, gave him a call. “Jerry, in his own way said, ‘I think you ought to look at this,’” said Buss. “He was the personal contact who motivated me.”

“Daryl was my first grad student and a marvelous one,” said Bisgard, “He came as an already highly trained veterinary cardiologist and physiologist, but wanted to increase his research skills and credentials. He finished MS and PhD degrees in an astonishing three and a half years. He was clearly talented and had leadership qualities. He was already an experienced Physiology Department Chair at Florida when I became the first chair of what is now Comparative Biosciences. I visited him a few times in those early days to pick his brain. He clearly influenced my thinking in building our new department. He was not only a brilliant researcher and teacher at Florida, but also a very influential leader at Florida. It was clear to me that he had the skills and personality to be a great dean. Naturally, I am extremely proud of Daryl and his accomplishments as dean.”

Buss realized that Wisconsin and Florida had many parallels. They were both young schools, both had excellent medical schools, the founding faculty had a strong leadership group and they both had the same mentality. “You never heard ‘you can’t do that, we’ve never done it that way,’” said Buss. Madison also fit the Busses’ geographic and institutional requirements.

In 1994, Buss and his wife moved to Madison where he began his tenure as dean. Only the second dean in the School of Veterinary Medicine’s history, he found an exciting environment open to innovation. “The people here have always looked first at how we can serve students to the best of our ability,” said Buss.

Buss helped build a program highly valued by the state of Wisconsin and widely recognized nationally as a premier place to learn and conduct research. Those successes include considerable growth in both research expenditures, clinical activities, and nearly a 100% increase in clinical visits to the veterinary medical teaching hospital.

Buss also played a role in the return of the Wisconsin Veterinary Diagnostic Laboratory to campus (after more than 40 years away). “It’s a separate unit, but there is a tremendous amount of collaboration back and forth,” Buss said.

“And our students get to know the pathologists, which is important
Making a difference

Elliott Moeser, PhD, knows that every gift is a way of expressing how you feel about another person—or in this case, an institution.

“I glow when I think of the tremendous education my son received at the UW School of Veterinary Medicine (SVM),” said Moeser, superintendent of schools for the Richfield School District, Richfield, Wisconsin and Alderman for the City of Glendale. “I appreciate what the school has done for him, his family—and as a resident of Wisconsin, I am very proud that we are providing this wonderful education for our youth.”

“Do I feel I should give something back?” said Moeser. “I certainly do! You thank the people who have done amazing things for you.”

When Moeser met Dean Daryl Buss while visiting his son at school, he asked the dean. “What do you need? Where will the money be best used?” And Dean Buss suggested the Dean’s Annual Fund for Excellence …

“Giving the school the flexibility to use the money where it is most purposeful is a benefit to the students, the university and the animals that receive care at the hospital.”

“My son’s education was priceless,” he said. “Anything we can do to help the School of Veterinary Medicine in these times of economic difficulty—those of us who can provide support—we need to do it.”

Moeser believes people can make a difference, whether by their actions or through donations. Janet Raddatz also believes in the power of giving. “I give to the Dean’s Annual Fund because it allows the school to take advantage of opportunities or respond to unforeseen events,” said Raddatz, Vice President - Quality & Food Safety Systems, Sargento Foods Inc., Plymouth, Wisconsin and UW SVM Board of Visitors member.

“As board members, we learn a lot about the school and the problems it may face. You trust the people who are making the decisions,” said Raddatz. “Many people who are giving give because they have pets and they want to know how their giving relates back to their pet. Giving to the Dean’s Fund, you have to understand that it sometimes takes money to make money—one example is the new diagnostic imaging center.”

Raddatz is referring to one of the school’s current priorities—a new state-of-the-art Imaging Center. A $3 to $4 million dollar project, money from the Dean’s Fund is helping support the materials necessary to educate potential donors about the importance of the new Imaging Center. Raddatz hopes her investment in the Dean’s Fund will have a great return and the school can raise the money necessary to complete this project.

“I’ve been a companion animal supporter for years and years,” said Raddatz. “But after learning more about the Dean’s Fund, I realize this flexibility will continue to enhance all care for all animals.”

— Lori Strelow

Honoring Dean Buss

Daryl and Sharon Buss wish to establish a graduate program fund to provide support for the Comparative Biomedical Sciences Program. Buss is an alumnus of this program, which was then named the Veterinary Science graduate program in the Department of Veterinary Science. The purpose of this fund is to provide funding to attract and improve the educational opportunities for the graduate students in the program. If you would like to make a gift to the “Daryl and Sharon Buss Graduate Program Fund” you can call Kristi Thorson at 608-265-9692 or mail your donation to: Daryl and Sharon Buss Graduate Program Fund, UW School of Veterinary Medicine, 2015 Linden Drive, RM 2170, Madison, WI 53706.

Donations can also be made online: www.vetmed.wisc.edu/BussGradFund.320.3.html

Dean Buss moves into an administrative role in veterinary medicine.

because many will be users of that facility when they move on in their careers.”

Once again, the next step for the Busses is an open door. They plan to spend winters in Florida and summers in Minnesota. “It will be an opportunity to pursue other interests and hobbies,” said Buss. “I plan to continue my service on a USDA committee (the Advisory Committee on Biotechnology & 21st Century Agriculture, aka AC21), and I hope to find ways to participate in some AVMA activities.”

But don’t think Buss will be washing his hands of UW–Madison. “After a total of more than 20 years (grad student plus dean) at this institution, that certainly won’t happen,” said Buss. “We plan to be back for Bascom Hill Society and other events, and we will always be following the progress of the School of Veterinary Medicine and campus.”

This past semester, Buss taught his last group of Cardiovascular Physiology students. “I get to meet our first-year students right off the bat without my dean hat on,” he said. “And I get to do a little teaching. And for that I’ll always appreciate the indulgence of the faculty.”

Buss also gets a chance to share some of his personal wisdom with the class, perhaps some wisdom he gained in that one-room schoolhouse. “There’s a great range of opportunities available,” said Buss. “The door may open, but no one is going to push you through it.”

— Lori Strelow

“What do you need? Where will the money be best used?” And Dean Buss suggested the Dean’s Annual Fund for Excellence …
Show dog recovers from tail fracture

Elliot, an Irish Setter, is both a beautiful show dog and a prolific breeder for his Wisconsin owners. “In 2008, he was one of the top five Irish Setters in America in showing,” said Elliot’s owner, Heidi Laabs. “He’s sired a number of litters including one litter of 16 that has 12 champions, which is a record in the Irish Setter world.”

In August 2010, Elliot’s championship run took a different turn when he rushed out of the bathtub and began spinning around in circles. He was out of Laabs’ sight when he made a huge yelp and came back with his tail drooping.

“I didn’t think much of it,” said Laabs. “I thought he had probably just whacked it and bruised it. The next day it was still droopy and I called our own veterinarian who said ‘he probably just severely bruised it, give him some Rimadyl and I’m sure he’ll be fine in a couple of days.’ So we did and he seemed, maybe, a little bit better.”

Several days later, Laabs and Elliot traveled to the Twin Cities for a show, but Elliot began to lick and chew his tail. By the second day of the show, his tail was noticeably swollen, so Laabs returned to Wisconsin for medical care.

“We went back to our local veterinarian who confirmed that it was infected. He did an x-ray and did see that it was broken,” Laabs said. “He attempted to splint it and gave us some antibiotics. Within a couple of days, he sent us off to the UW orthopedic surgery center.”

By this time, Elliot’s tail fracture was complicated by an infection and open wounds. “That is what made it more challenging for us,” said Dr. Jason Bleedorn, who was assigned to Elliot’s case along with surgical resident Dr. Kelson Danielson. “We were more worried about the skin healing versus the bone.”

When an animal fractures a tail, the most common treatment option is to amputate. Elliot’s owners desperately wanted another option, one where he could keep his tail, and continue as a show dog.

“I just kept saying ‘No, you’ve got to find something else. We’ve got to do everything we can to save this tail,’” Laabs said. “Throughout, the doctors kept emphasizing that they were not at all certain that they would be able to save it, and there was no guarantee hair would grow back if they did, because the skin was so severely infected.”

Dr. Bleedorn investigated other options, many of which are hard to manage. He found only two cases in the veterinary literature where small bone plates had been used successfully to repair tail fractures.

“This was a real challenge because the tail is small—the bone is two centimeters long and four to eight millimeters in diameter,” Dr. Bleedorn said. In spite of these complications, Elliot was scheduled for surgery.

Dr. Bleedorn’s team used a small bone plate to bridge the fracture and fuse the vertebrae to an adjacent segment. The surgery was followed by several months of frequent, sometimes daily, visits for wound care. However, the Laabs were committed to providing Elliot with a successful outcome.

Elliot’s surgery was a success and he was soon back in the show ring. He has won several awards including ‘Best Veteran in Show’ in Syracuse, New York. He traveled to the Irish Setter Club of America National Specialty in early May, where he won the Stud Dog Class, and in July showed at the French National Championship Show and then the World Dog Show in Paris, France. In October, he earned his AKC Grand Championship by winning the Irish Setter Club of New England Specialty Show.

“I couldn’t be more grateful for the care and treatment of Elliot by the entire staff in orthopedic surgery and also for the kindness shown to us,” Laabs said. “I know that everybody worked their hardest to save that tail.” UW Veterinary Care and the Laabs family worked as a team to bring Elliot back to the show ring.
A frightful wound receives surgical help

Blood in the water trough: a sight that would chill any horse owner to the bone. When Emma’s owners saw it, they knew nothing good awaited them in the barn.

Emma, a two year old paint mare, shocked her owners the moment they spotted her. “When Emma got up, my mom saw the flap of skin hanging down on her face,” said Megan Richter, Emma’s owner. Emma was cut so severely under her eye and down her cheek that the skin was literally hanging off the side of her face. In that panicked moment, they wasted no time asking ‘why.’ Their local vet instructed the Richters to take Emma straight to UW Veterinary Care.

“My first reaction on seeing the injury was, ‘Let’s get her there ASAP,’” said Richter. With a makeshift bandage around the gaping wound, Emma was loaded into a trailer and headed to Madison.

Dr. Sabrina Brounts, a large animal surgeon at the SVM, greeted Emma and removed her bandage to assess the wound. “It looked dramatic,” said Brounts. “Part of the sinus was open, part of the bone was fractured. It looked like the horse got caught on the fence and freaked out.” A later examination of the fence line in Emma’s pasture revealed a tell-tale clump of hair, confirming Emma’s source of injury.

In spite of Emma’s dire appearance, Brounts was optimistic. “The face usually heals pretty well,” she said. “There’s a lot of vascular supply.” Although one facial nerve appeared damaged, resulting in a drooping lip, Emma’s eye had escaped harm. “She was pretty lucky,” Brounts said.

Brounts and her team wasted no time getting to work on Emma, anesthetizing her so they could begin the delicate work of cleaning dirt, hair, and bone fragments from the large wound site. Both Brounts and Dr. Adam Biedrzycki, a large animal surgery resident, began stitching Emma’s face back together, working against the clock to avoid complications caused by keeping a horse on the table for long periods of time.

“We did a first layer to cover the hole in her head,” said Brounts, explaining how a layer of suture of the subcutaneous and muscle level was needed to cover Emma’s gaping sinus. Another layer of suture in the skin sealed the wound, leaving some space for drainage as the wound healed. Operations of this nature can be difficult. Stretching the skin too tight could cause the skin to die later and disrupt the healing process.

After her operation, careful monitoring of the wound preempted Emma’s next hurdle. “There’s always a major risk of infection,” said Brounts. But Emma’s recovery began right on schedule, healing with only minor tissue death. “Not everything held, but we didn’t expect it to,” said Brounts. According to Brounts, some tissue death after a surgery like this is normal. “If some of the skin dies, you take it off and hopefully new skin will grow.” Under the watchful eyes of her owners and veterinarians, Emma is now well on her way to a full recovery.

“She is currently almost entirely healed,” said Richter. “She has a few scars, but nothing too severe.” Richter hopes to begin work with Emma again soon, and get her back on track to starting the young mare under saddle. She credits Brounts and the large animal team at the SVM for Emma’s recovery. “We received the best possible care,” said Richter. “They went above and beyond to make Emma comfortable. I would take any animal there in a heartbeat.”

— Ali Bartol

WORLD-CLASS COW continued

on the biosecurity of show cattle for SVM students and invited any other volunteer participants. Each individual would attend an orientation on show check-in procedures. The students and volunteers then signed up for two eight-hour shifts checking the cows and their certificate of veterinary inspection (CVI) as soon as they arrived at this world class show. They, along with Dr. McGuirk and DATCP veterinarians, made sure that every cow unloaded matched an animal listed on the CVI, either by using an official identification tag, metal ear tag, tattoo, or registration paper.

“The first year we did this I put notices around the school looking for volunteers or students who wanted to earn one credit,” said McGuirk. “I had about 20 students. This past year more than 40 people signed up, including students participating for a second year because of the great learning experience and the opportunity to see elite cattle and meet exceptional exhibitors.”

“I had no idea what to expect,” said student Crawford. “I’d never been to the World Dairy Expo. But after a short time, I became pretty solid on how to check over a health certificate and how important it is for a cow to be tattooed so that it clearly shows up. I would recommend the experience to anyone interested in large animals.”

Most of the students participating in the program had never been to World Dairy Expo and had no knowledge of the size and scope of the show. Their participation exposed them to the importance of interstate and international regulations to control important diseases like tuberculosis. With an informative orientation followed by hands-on application of regulatory requirements, the whole experience was “extremely informative,” said McGuirk. “Even informative to me, a veterinarian who is somewhat familiar with the process.”

Beginning at 4 pm on Friday and continuing through 1 pm on Sunday, “students were put in a position of authority,” said McGuirk. “They were on the front line with exhibitors and cattle from all over North America. The World Dairy Expo gave them jackets so they had an official look and status. The students were professional and knowledgeable.”

“It felt really cool because we were official,” said Crawford. “It gives you a lot of experience interacting with people who might be your future clients. I think this was especially important for a first-year student. It also reinforced my desire to study food animal production medicine.”

McGuirk made sure she stopped by during every shift. “We never got backed up,” she said. “And later at the Friends of Expo dinner, Expo management paid tribute to all involved in the check-in process and acknowledged how professional, competent and enthusiastic the UW Veterinary Medicine students were.”
When people say “your job will take you places,” they don’t usually mean to a remote village of Papua New Guinea, sitting by someone’s bedside in the night as they donate blood. But that’s just one of the places that Sara Erickson’s work has taken her, when she began her graduate research at the UW School of Veterinary Medicine. Erickson studies lymphatic filariasis, a disease caused by a parasitic worm that is carried and passed on by mosquitoes. Erickson completed her PhD degree in August 2011.

“I’ve worked in mosquito research for 11 years now,” said Erickson, who still finds no shortage of fascinating phenomena in the mosquito world to keep her busy. The research for her PhD thesis targeted the different parasitic worms responsible for lymphatic filariasis, the disfiguring disease commonly known as elephantiasis. “Of course, we don’t have those in the States,” said Erickson. “But I’ve always enjoyed traveling.”

That travel took Erickson to Papua New Guinea, one of the most endemic regions for lymphatic filariasis. Although not fatal, the disease is nonetheless destructive, with a devastating morbidity rate. “Seeing the impact in endemic areas is really astounding,” Erickson said. “People can no longer live the same life.”

Erickson and her advisor, Bruce Christensen, designed research projects to investigate the parasites responsible for the disease and the mosquitoes that transmit it. “We want to critically define how good mosquitoes are at transferring these diseases,” said Christensen. “We try to look at mosquitoes in the real world, and how well they do or do not function.”

According to Erickson, these data are invaluable to any plan to eradicate the parasite. “Lymphatic filariasis is being targeted for elimination,” she said. But the drugs available affect only one stage in the parasite’s lifecycle, meaning that it’s easy for them to resurge if the whole population isn’t eliminated. An eradication program must be carefully timed based on accurate data. Cutting the program short risks a resurgence, while running it too long is economically impractical.

Armed with a grant from the NIH Fogarty International Center and an agreement with the Papua New Guinea Institute of Medical Research (PNGIMR), Erickson left for Madang, Papua New Guinea to set up her research program. Her first task was to find an endemic village that could be studied in detail, and that proved harder than expected.

“That’s pretty easy to write in a grant. It’s just a few lines,” said Erickson. “But it took about a month and a half.”

Erickson’s research requires human blood samples to test the current levels of infection and track the parasite’s rate of spread. Not only is this logistically complicated, as the parasite is only present in the bloodstream by night, but it also requires a relationship with the local people. “It takes a long time to build that relationship,” said Erickson. She credits PNGIMR for the help she received in making these connections possible.
Once that trust was established, Erickson went into the village with the PNGIMR team to collect blood samples, setting up cots to draw blood overnight in what they call “night bleeds.” “It’s an event then,” said Erickson. “The children come out and follow us around.” In this festive atmosphere, they gather the blood they need to collect their data, returning to the lab the next day.

Moving from village to village, Erickson experienced the diverse culture of Papua New Guinea. “These villages are five minutes apart, but their cultures can be very different,” said Erickson. “Every village has its own dialect.” Locals speak Malaysian Pidgin, a unique language with so many near-English words that Erickson found she could understand it. “There’s no real language barrier,” said Erickson. But, like all cultural differences, some aspects of the language took getting used to. “I was always called the ‘white meri,’” said Erickson. “That’s their word for ‘woman.’”

After two trips overseas, Erickson learned more than you can put in a research paper. “Working in Papua New Guinea, you never know what to expect on a given day,” said Erickson. “You learn to accept it.”

Even with her thesis work completed in August 2011, Erickson has no intention of cutting her ties with Papua New Guinea. “We still have one and a half years left on the project,” said Erickson. She looks forward to keeping up the ties she forged by her research. “You want to build scientific relationships with people in other countries,” said Erickson.

Erickson’s next move will build even more connections as she works on her post doctoral research at the Walter and Eliza Hall Institute of Medical Research in Melbourne, Australia, where she will be their first mosquito researcher.

Dr. Sue Schaefer, UW Veterinary Care orthopedic surgeon, was very frustrated with the tools available to her for diagnosing shoulder problems in dogs. So, she began her own research on the application of MRI technology to musculoskeletal anatomy and to orthopedic problems in dogs.

“Many of our clients come in and say they’ve had an MRI on their knee or on their shoulder and they want the same thing done for their animal because they understand that it is a very useful diagnostic tool,” Schaefer said. “But we didn’t have a baseline for being able to look at the dog shoulder. I could do an MRI of a dog that has lameness in its forelimb and has pain in its shoulder, but I wouldn’t know what I was looking at.”

Since no one had written an anatomy guide to what a normal dog shoulder should look like under MRI, Schaefer decided to do just that. She began her research several years ago by using MRI to compare normal joints to abnormal joints and is now using this information for what she calls the “Dog Shoulder Atlas.”

“Have you to have a baseline, you have to have a guidebook,” she said. “If we’re doing an MRI and we are trying to look for torn ligaments or torn cartilage we need to know what normal looks like and we need to know where we would find it on the MRI—where in the joint I should find one specific tendon and another ligament, where’s the normal position, what’s the normal size, those kinds of things.”

Schaefer began her research by using cadaver joints from dogs who died from other unrelated illnesses. She used these joints in her “normal” group and evaluated them with MRI to determine “normal.” From this, she created scans of different sections and different views and angles of those sections to put together her atlas of normal joints.

“We were able to match the anatomy perfectly with what we see on the MRI so I can now go back to the MRI and say ‘oh I know this is the bicep tendon, I know that this is the supraspinatus tendon, I know this is the humerus, because here’s my guide’,” Schaefer said. She would then compare the scans from her “normal” group to actual patients in order to determine the nature and location of the problem.

“This is really a foundation,” said Schaefer. “We undertook a clinical trial performing MRIs on dogs in our clinic with shoulder problems. We then confirmed [through] surgery that the MRI showed the same changes seen at surgery. We were able to demonstrate that MRI is a useful tool. Through clinical research we were able to validate its application to diagnosing shoulder injuries in dogs. We need to develop an atlas for all of the joints in the dog, but we’ve started with the shoulder. I wanted to start here because it is a very challenging joint.”

Now Dr. Schaefer and others can use this atlas to better diagnose patients who have shoulder problems and to prescribe the best treatment options. “The more we learn about the shoulder, the more we understand how complex it is, the better we are at diagnosing very specific tendon and ligament problems. If we get better diagnostic information, then we can figure out better ways to treat the animals. It improves our therapeutics.”

Schaefer isn’t finished yet. Her next area of interest is the “Dog Hip Atlas!”

**PET TIPS**

Spring has sprung, and believe it or not, your horse is twice as eager as you are to see that green grass. But be cautious about letting him have free reign on a lush new pasture. His body may not be quite ready for the rich grass, and his impulse to pig out may put him at risk of colic or founder. Increase his turnout time little by little to keep his eating habits in check.
In Memoriam

Leland C. “Doc” Allenstein passed away, October 22, 2011. “He will be missed by his family, friends, colleagues at the UW–SVM, and the countless veterinarians and dairy producers whose lives he impacted,” said Daryl Buss, dean of the School of Veterinary Medicine.

Dr. Allenstein was born in Lamont, Iowa and received his doctor of veterinary medicine degree from Iowa State University in 1950. He began his veterinary practice in Whitewater, Wisconsin and six months later, purchased the practice. For more than 40 years, dairy clients and their families benefited from his expertise, wisdom, and thoughtful care. He was a natural instructor and enjoyed explaining his diagnoses and treatments.

Dr. Allenstein possessed the unique ability to relate to scholar and dairy producer alike. A strong supporter of veterinary medical education, he was a driving force in the establishment of the UW School of Veterinary Medicine. In 1987, Dr. Allenstein became a clinical professor and later a faculty associate. He taught while maintaining his practice with 18 herds in the Whitewater area, and he gave his students the opportunity to learn needed science, while gaining practical knowledge from a hands-on veterinarian. He received numerous teaching awards including the SCAVMA Clinical Teacher Award from the American Veterinary Medical Association (AVMA), a top teaching honor in the nation for a veterinarian.

In addition to clinical practice and teaching, Dr. Allenstein wrote columns for Hoard’s Dairyman and was chief veterinarian at World Dairy Expo for more than 25 years. Dr. Allenstein served as president of the American Association of Bovine Practitioners and received its highest honor—the Practitioner of the Year Award, in 1982. He was elected a member of the National Academy of Practice and served on the AVMA’s Council on Education.

In recognition of his contributions, the School of Veterinary Medicine named its dairy teaching herd the Leland Allenstein Dairy Teaching Herd. Dr. Allenstein was also named a Distinguished Service Award winner by the Wisconsin Holstein Association, Industry Man of the Year by World Dairy Expo, and Wisconsin Veterinarian of the Year. In addition, he was an honorary member of the Klussendorf Society and the 2006 National Dairy Shrine Guest of Honor.

Allenstein was also dedicated to his community. He was on the board of directors of First Citizens State Bank for more than 40 years, served on the First English Lutheran Church council, and was past president of the UW–Whitewater Quarterback Club.

“Doc” Allenstein was loved and respected by his family, his community, and the veterinary profession. A compassionate man, he will be remembered as a warm, gracious, sincere, fun-loving person and the ultimate veterinary practitioner, scientist, and teacher. Dr. Allenstein designated $100,000 from his estate to help support the Dairy Teaching Herd. If you would like to make a gift in Dr. Allenstein’s honor to support the herd, you can call 608-265-9692 or mail your donation to: Dr. Leland Allenstein Dairy Teaching Herd, UW School of Veterinary Medicine, 2015 Linden Drive—Rm 2170, Madison, WI 53706.

Alumni

Moving forward while staying connected

“Keep in mind how small and tightly connected the veterinary medical world is,” said Diane Larsen, DVM and PhD alumni from the University of Wisconsin School of Veterinary Medicine (SVM), when asked what advice she would give veterinary medical students. “Value the contacts you are making. Remember them. Keep those contacts open.”

Larsen’s career is filled with connections. Getting to know different veterinarians in many different positions guided her to a job that she calls “a perfect mix of veterinary medicine, basic science and personal interaction.” Larsen, an R&D leader with multinational animal health company Merial, is in charge of technical deliverables for drug development.

In this position, she is never bored.

“I lead cross-functional teams and follow a product from research to launch and through life-cycle management,” said Larsen. And for her, that means participating in every aspect of the business.

“I guide the team to get us to each milestone,” she explained. “We develop a formulation that is stable, safe and efficacious. I work with the clinical program designers to work out timelines and make sure we’re within budget. I work closely with manufacturing, making sure whatever has been produced in the lab can be scaled up to a commercial product. I work with the packaging designers, marketing and distribution. I am ultimately responsible for it all coming together.”

Graduating from college with a biology degree, Larsen joined friends in California to be near the ocean and imagined a career in marine biology. But while working in a water testing laboratory, she thought about another one of her dreams—taking care of companion animals in her own private practice.

“One of the first things Larsen did upon her return was to apply for a job in one of the research laboratories. She ended up in the Easterday lab, washing glass and doing whatever odd jobs needed to be done. It was a great connection—Dr. Bernard Easterday was the Dean of the SVM and influential in her interest in science.

“I continued working in the lab.

Alumni Notes

Steve Trostle will represent District II on the board of directors for the American Association of Equine Practitioners. Presently he is the vice president of Blue Ridge Equine Clinic in Earlysville, Virginia. Previously Trostle completed his residency in equine surgery at UW School of Veterinary Medicine in 1994 and was a member of the UW faculty for five years.
Moving forward while staying connected

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ment continued,” said Larsen. “I was there for five years. I gave my-

self a goal to practice for at least five years to give me enough ex-

perience to feel comfortable as a practitioner.”

Her close proximity to the university and her work with Gengler afforded Larsen many healthcare company. This particular connection would be key to her future plans.

A colleague in Schultz’s lab, Dr. Stacey Schultz-Cherry, moved to the USDA in Athens, Georgia and offered Larsen a post doc in poultry virology. Moving to Georgia, she reconnected with Kevin Schultz. “I was looking at industry and spoke with Kevin to get an idea what positions were available,” she said. “Merck split into Merck and Merial and Merial moved to Duluth, Georgia. The rest is history.”

Larsen remains very connected to the SVM. She is currently a member of the SVM Board of Visitors and serves as chair of the SVM Alumni Board. She often volunteers at student orientation and at various other school functions throughout the year.

“If any students are interested in hearing more about this pathway, I am happy to talk to them about it,” said Larsen. “It is all I hoped it would be—that much and more.”

— Lori Strelow

When asked what advice she would give veterinary medical students—“Value the contacts you are making. Remember them. Keep those contacts open.”

opportunities to visit the school and stay connected. When the school developed a PhD program for DVMs, Larsen knew this was her next step.

Under Virginia Hinshaw, a professor of virology, Larsen began her graduate studies. When Hinshaw left to become the dean of graduate studies and vice chancellor for research at UW-Madison, Larsen moved into Christopher Olsen’s lab, doing her PhD work on immune responses to swine influenza. Her work in the Olsen lab was complemented by a rotation through Kevin Schultz’s lab, where she worked in immunology until he left to take a position with Merck, a global

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— Lori Strelow

throughout my four years and discovered I was very interested in science. The faculty in charge of the labs would give me more and more responsibility and by the time I finished my DVM, I had it in my mind that I really liked research and saw how many opportunities were available outside of being a practitioner.”

For awhile, Larsen held tight to her goal of practicing clinical veterinary medicine and found a position at a small animal clinic in Verona, Wisconsin, where she made another important connection. The clinic’s owner was Dr. William Gengler, who would go on to become the SVM associate dean of clinical affairs and director of the Veterinary Medical Teaching Hospital. “My learning environment continued,” said Larsen. “I was there for five years. I gave myself a goal to practice for at least five years to give me enough experience to feel comfortable as a practitioner.”

When asked what advice she would give veterinary medical students—“Value the contacts you are making. Remember them. Keep those contacts open.”
Your pet can give the gift of life!

If your dog or cat has ever suffered an emergency and required critically needed blood products, you understand the gift of donated blood. Human blood drives are common across the country to keep hospitals in stock of a well-needed supply. But people don’t often think about animals needing blood—they also can develop anemia (low blood cell count), suffer blood loss, and have clotting problems that require transfusion of blood, red blood cells or plasma containing clotting factors. Without these blood products, the lives of these pets could be lost.

Did you know that your cat or dog can become a blood donor and give the gift of life? At UW Veterinary Care, we can collect a unit of blood from your animal, then process and appropriately store that unit. During this process, your pet is given fluids, treats and lots of love!

And with your animal’s blood donation comes additional benefits, available for up to 2 months (dogs) or 3 months (cats) after the last donation:

- Free physical examination
- Free food (Purina or Hill’s pet food)
- Free routine vaccinations
- Free heartworm testing and preventative medications
- Free flea/tick preventatives
- Free blood analysis, urinalysis and fecal tests as covered in the screening process
- Free preventative health examinations
- Free dental scaling and polishing
- And most importantly, pride in your pet for giving back to others in need

(To remain eligible for benefits, cats must donate at least four times and dogs six times per year.)

For more information:

bloodbank@vetmed.wisc.edu
800-DVM-VMTH (386-8684)
UW Veterinary Care Emergency Room is open 24/7. No referral necessary