Pro

files

College of Veterinary Medicine

Summer/Fall 2013

Erika K. Fernholz
Class of 2016
As dean of the college, fall is one of my favorite times of year. Every autumn, we welcome the return of some of the brightest veterinary students in the world, many of whom will go on to discover novel diseases, develop new and better treatments and cures, and promote new methods of safeguarding the nation’s food supply. Some of these treatments and cures will benefit humans as well.

One of the questions students will be asking one another is “How did you spend your summer?” Several will have spent time working in our Summer Scholars program with select researchers from the college. Others will have pursued internships or graduate degrees here and at other institutions. Opportunities at the college are plentiful and include three prestigious renewable training grants that employ post- and pre-doctoral students in various aspects of veterinary research, a variety of graduate degree programs in both veterinary medicine and public health, and fascinating study-abroad opportunities that expose students to emerging One Health issues.

In this issue of Profiles, you’ll read about the many student organizations and academic opportunities we offer. You’ll also read about the Tomsche family’s four generations of veterinarians, and how veterinary practice has changed with each successive generation. And you’ll learn how two motivated students formed a new club to encourage much-needed discussion on animal research while exposing their peers to opportunities in the field.

Today there are 25 registered student organizations at the College of Veterinary Medicine, including one to help students achieve business literacy, another that reaches out to low-income families by providing basic veterinary care, and one that provides peer-assisted coaching to students struggling with a particular course. No doubt, the college’s student body is engaged, motivated, and progressive.

The costs these students bear are steep, and many students are eligible for scholarships and fellowships. In fiscal year 2013, the college awarded a record $472,000 in scholarships to veterinary students.

Please join me in congratulating this year’s graduates and welcoming our returning students. While you’re at it, why not show your support with a gift to a scholarship or fellowship fund or student organization? Consider it an investment in the future of veterinary medicine.

With warm regards,

Trevor Ames, DVM, MS, Diplomate ACVIM
Dean
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On the cover

Erika Fernholz, class of 2016, plans to become a dairy vet and practice dairy production medicine. A recipient of the Richard V. Huston Scholarship, she holds down two jobs while attending school. (See story on page 19.) Photo by Sue Kirchoff
When Grant Tomsche graduated from the College of Veterinary Medicine in May, he became the fourth generation large-animal practitioner in the Tomsche bloodline.

“When I was a kid, I spent a lot of time riding with my dad in the pickup, visiting clients and their animals, and those experiences have become some of my fondest memories,” says Grant.

The Tomsche family veterinary tradition began in 1929, when Emil Tomsche opened a practice in his hometown of Albany, Minnesota. Since then, Emil’s son Ed and grandsons Daniel and David have expanded the family practice, Minnesota Veterinary Associates, and added three other veterinarians as partners. Great-grandson Grant could also join the practice one day.

The full-service veterinary practice consists of five clinics—Albany, Little Falls, Melrose, Rice, and Sauk Centre—and covers most of central Minnesota. Minnesota Veterinary Associates employs 10 veterinarians, along with 20 certified veterinary technicians, veterinary assistants, and administrative staff. The Tomsches also operate Pawzaroo, a pet boarding, day care, training, and grooming facility in Little Falls.

Over its 84-year history, the Tomsche practice has evolved to adapt to the ever-changing field of veterinary medicine. Emil, the son of German immigrants, earned money as a professional wrestler to put himself through Iowa State University.

After graduating, he practiced out of his home, where he performed necropsies of chickens in the mudroom sink.

“He was old school,” says grandson Daniel. “They tell me when he’d go out to a farm, he’d be wearing a tie. He’d take his tie and shirt off, pull a calf, and put his dress clothes back on. He was quite a talker, too.”

Emil’s son Ed experienced his father’s social skills firsthand.

“We’d spend 15 minutes treating the animal and two hours visiting,” says Ed. Despite the long lull between cases, Ed cherished the time spent with his father. “Let’s just say I was born into veterinary medicine,” he says. “I loved animals. I loved seeing my dad work with the
animals. And I loved seeing the respect his clients had for him.”

When Ed graduated from the University of Minnesota in 1955, he opened a new branch of the family practice in Melrose. Unlike his father, though, Ed kept a furious pace, answering calls at all hours, even holidays.

“I think the first five, six, seven years we never took a day off,” says Ed. “We had no help. You couldn’t beg, borrow, or steal a young vet back then.”

Ed’s son Daniel recalls those days, too: “When I was little, my dad was gone when we got up in the morning and was rarely home when we went to bed at night. On weekends my mother shoved us in his vet truck, and we would ride around with him. I probably grew up knowing what I wanted to do my whole life. I just loved working with livestock.”

Three decades later, Daniel and his younger brother, David, joined the family practice, one right after the other, in 1981 and 1983. Daniel moved back to Albany, his grandfather Emil’s former territory.

“I was a little bit afraid of being Ed’s son,” says Daniel. “I didn’t want to get lost in his shadow. I felt Albany was a good place for me to spread my wings.” He soon purchased a building, expanding the family practice.

David also knew from an early age that he wanted to be a vet. And like his older brother, David pushed the practice forward, focusing on herd health rather than individual animals. But David wanted to push the boundaries even further.

“One thing led to another,” David says. “We created a small animal component. We brought more people on. And we opened our retail business.”

In 1988, Ed pulled his sons aside.

“I could tell we were stretching his comfort zone,” says David. “He said, ‘I think you guys need to buy this clinic. You’re taking it in a different direction. I don’t disagree, but it’s way different from what I know.’”

When clients began asking to purchase animal health products at catalog prices, brothers Daniel and David expanded into retail sales in 1994, founding Melrose-based Leedstone, formerly Stearns Veterinary Outlet and Pharmacy.

“We figured we had to get into the retail business or lose the sales we were making, even if it meant lower margins,” says David. Today, Leedstone sells more than 1,500 animal care products, including pharmaceuticals, to consumers, farms, and veterinarians. The company employs 80 people and exports animal health care products and feed additives to Japan.

The Tomsches have seen many changes over the span of the practice. Tractors have replaced horses. Local creameries have come and gone. Pipelines eliminated the need for hand milking and are now being supplanted by milking parlors. And dairy farms and other livestock operations continue to consolidate. Larger farms—some with 7,000 milk cows—and new technologies have changed the role of large animal veterinarians, who now travel farther to fewer farms but find the work just as rewarding.

“I believe veterinary medicine is a noble pursuit,” says Grant. “Not only do I get to be in agriculture, but I get to practice medicine. So, I guess that makes it pretty easy for me to get up in the morning.”
Not long after Zoe Bianco and Chris Thomson met while attending freshman-year orientation, they decided to undertake a major endeavor to launch a student club.

“I saw a hole within the available student clubs at the College of Veterinary Medicine and within the University of Minnesota research community, which is a very productive and interesting community,” says Bianco, president of the Research Animal Medicine (RAM) club. “So, I said, ‘Hey, Chris, do you want to start a club?’ ”

Within months, Bianco and Thomson had surmounted several challenges. By spring 2012, they were holding preliminary events and planning for a fall 2012 grand opening of the RAM club.

“There were hoops we had to jump through in founding the club, but there has been so much enthusiasm from the faculty and students that it has motivated us to work hard and to be successful,” says Thomson, RAM club vice president.

The RAM club’s primary mission is to foster constructive conversations about all aspects of animal research and provide educational opportunities to encourage that discussion among students, faculty, and the community.

One of the club’s first challenges was to acquire funding to support its mission. Bianco and Thomson first turned to the University Medical School’s Experimental Surgical Services (ESS), a preclinical cardiovascular laboratory. ESS offered to fund the club if Bianco and Thomson could come up with a matching donation from a non-university research facility. Minneapolis-based Medtronic, a global leader in cardiac devices, agreed to match ESS funds.

Today, the RAM club has roughly 50 active members—about 17 percent of the participating student body—all working to advance the understanding of research animal medicine.

“Veterinarians bring a unique viewpoint to animal research because they have a broad perspective in comparative.

Zoe Bianco, Chris Thomson, and other members of the Research Animal Medicine club had an opportunity to work with black bears—including two cubs—when they shadowed a University researcher working on a project for the Minnesota Department of Natural Resources and U of M Department of Fisheries, Wildlife, and Conservation Biology.
“Veterinary students are increasingly aware of these needs, and many are becoming more interested in research as a career alternative,” says Washabau. “We are seeing more interest in our combined DVM/PhD degree program, as well as non-degree research fellowships following the DVM curriculum. Parallel to this development is the increased recognition of companion animals as excellent animal models of human disease.” Increasingly, veterinary research that focuses on animals as models of human disease provides breakthrough discoveries that benefit humans and non-human animals alike.

“Animal-based research affects both veterinary and human medicine,” says Thomson. “There are partnerships occurring in research between the medical and veterinary schools, and vets need to be involved in the conversation about research because we are the advocates for animals and animal welfare.”

The RAM club accomplishes its mission by hosting monthly speakers, hands-on wet labs, laboratory tours, journal club sessions, and educational workshops. To make the most of these events, each month has an assigned research theme.

For instance, October 2012’s theme was cardiac research. Dick Bianco, ESS program director and Zoe’s father, spoke to club members on animal models for cardiac research. The lecture was followed by a tour of the ESS facilities, and students then participated in a necropsy demonstration and suture practice.

Medtronic also hosted a tour in December 2012, providing students a glimpse into what it’s like to be a researcher in industry.

“There was time for discussion with several industry leaders on how they arrived at their current position and steps students could take to obtain an industry career in biomedical research,” says Bianco.

In one wet lab, 15 students shadowed University fisheries and wildlife researcher.
Animal research...
(continued from previous page)

David Garshelis as he monitored black bear populations for the Minnesota Department of Natural Resources and U of M Department of Fisheries, Wildlife, and Conservation Biology. RAM club members helped Garshelis measure body fat, weight, and body size.

“The den we visited had two cubs, so the club had hands-on experience taking measurements of both the mother and the cubs,” says Thomson.

Once a month, the group also meets for a RAM journal club session. This casual outing occurs either at Stout’s Pub in Falcon Heights or Black Bear Crossings in the Como Lakeside Pavilion in St. Paul. Dr. Paul Berger, assistant clinical specialist for research animal resources and advisor for the RAM journal club, chooses each month’s journal article and guides students through it.

“We wanted the journal club to be open to everyone,” says Thomson. “We made it casual, and we provide food for the group.”

Examples of recent workshops include a grant-writing session where students learned to write effective proposals and a workshop dedicated to developing the tools researchers need to speak openly about the necessity of the humane use of animals in research.

While the club exposes students to research animal medicine, opportunities in the field, and potential career paths, it also benefits the University by providing educational opportunities involving cutting-edge research. It may also help steer dedicated veterinary scientists into an animal research career.

“The University of Minnesota College of Veterinary Medicine is known for its research capabilities,” says Bianco. “There is a lot of great research going on at the college, the University, and in the community. We are just opening the door to all veterinary students to the research that’s already occurring.”

Gaining an edge through research training grants

The College of Veterinary Medicine (CVM) currently has three large training grants for both pre- and post-doctoral students hoping to pursue a career in research either in an academic setting or in industry. One of these training grants is specifically targeted to veterinarians. The Comparative Medicine and Pathology Training Grant, an institutional training grant (T32), was awarded by the National Institutes of Health (NIH) and is currently in its 10th year of funding.

“There is a huge need both nationally and internationally for veterinarians who are trained in basic and applied research,” says Dr. Cathy Carlson, professor in the Veterinary Population Medicine Department and director of the program. Thus, the purpose of the comparative medicine grant is to provide state-of-the-art biomedical research training for veterinarians.

“Before we had this funding, students wishing to pursue a PhD degree needed to seek out individual advisors who had research funding,” says Carlson. The T32 grant allows students to choose from more than 30 different mentors, identifying those whose research interests match theirs. Dr. David Brown, professor and vice chair of the Department of Veterinary and Biomedical Sciences serves as co-director of the program.

Drs. Eva Furrow and Annette McCoy are two of four veterinarians currently supported by the Comparative Medicine and Pathology Training Grant. Both are working toward PhDs with hopes
of eventually setting up their own research labs in an academic setting. McCoy will finish this summer, while Furrow will complete her training in summer 2014.

The college’s genetics programs are recognized as being some of the best in the world and as such attract top post-doc candidates. Both Furrow and McCoy are trying to unlock the genetic codes of disease conditions that affect both people and animals by using naturally occurring maladies in animals as models of human disease.

McCoy has spent the last three years trying to uncover the role of genetics in osteochondrosis in horses.

“It’s a common disease that affects a large number of foals,” says McCoy. “Genetics play a role in the disease, but no one has yet identified the genetic risk factors in horses.”

McCoy’s advisor, Dr. Molly McCue, was one of the first two PhD students supported by the grant. An associate professor in the Veterinary Population Medicine Department, McCue started her own research lab soon after obtaining a CVM faculty position.

“Molly is a superstar researcher who is a product of the program,” says McCoy.

A 2006 graduate of Michigan State University, McCoy completed an internship in large animal medicine and surgery at the CVM and a large animal surgery residency at Colorado State University.

Once the genetic risk factors for osteochondrosis are identified in the horse, the data could help medical researchers identify risk factors in humans.

Furrow is also working on a genetics project that could have far-reaching benefits for dogs, humans, and possibly cats. A 2007 graduate of the University of Pennsylvania, Furrow completed a one-year internship in small animal medicine and surgery at the University of Pennsylvania and a residency in small animal internal medicine at the CVM.

Currently she is working with Dr. Jody Lulich, professor, and Dr. Ned Patterson, associate professor, to identify genes that contribute to the development of calcium oxalate stones in the urinary tract of dogs. Mayo Clinic researchers are also collaborators on the project and are looking at stone formation in humans.

“People and dogs will likely benefit the most from this research because there is a substantial genetic component to the development of calcium oxalate stones in both species,” says Furrow. Certain breeds of dogs and families within breeds are also known to be at high risk of developing these stones.

“The comparative medicine grant allows us to recruit for top candidates across the country, and several trainees who have completed the program have been hired in faculty positions,” says Carlson. Researchers who receive funding through the NIH grant are given a relatively high stipend, compared with traditional funding, as well as money for tuition and fees, a travel allowance to attend conferences, and health insurance.

The CVM’s association with the Academic Health Center has also provided an advantage when applying for prestigious awards like the NIH comparative medicine grant.

“You have to be top-tier to receive one of these grants,” says Carlson. “It is competitively reviewed every five years, so it is important that our trainees move into research positions, either in academia or industry.”

CVM training grants

The CVM currently has three renewable training grants that employ post- and pre-doctoral students in various aspects of veterinary research.

**Comparative Medicine and Pathology Training Grant.** This three-year postdoctoral training program supported by the National Institutes of Health is designed to provide state-of-the-art research training to veterinarians. Graduates receive the advanced training needed for a career as an independent investigator in a research university or as a research team leader in industry. The faculty mentors in the program represent a diverse group of disciplines, including pharmacology, cell biology, infectious disease, neurobiology, physiology, genetics, and molecular biology. The grant program is directed by Dr. Cathy Carlson, Veterinary Population Medicine, and co-directed by Dr. David Brown, Veterinary and Biomedical Sciences.

**Fellowships in food animal biosecurity: infectious agents and zoonoses.** Funded by the National Institute of Food and Agriculture, these fellowships provide PhD training in the U.S. Department of Agriculture’s Targeted Expertise Shortage Area of sciences for agricultural biosecurity. Fellows receive multidisciplinary and comprehensive basic sciences training in animal infectious diseases, zoonoses, or biosecurity in preparation for leadership positions in research and practices pertaining to infectious agents affecting agricultural animals and humans. This fellowship is directed by Dr. Mark Rutherford, Veterinary and Biomedical Sciences.

**Training in neuroimmune-neurobehavior addiction research.** This federally funded pre-doctoral and post-doctoral training for biomedical scientists focuses on the interactions of drug abuse with the nervous and immune systems and integrates current understanding of these physiological interactions with their behavioral counterparts. This research program is supervised by Dr. Tom Molitor, chair of the Veterinary Population Medicine Department.
Expanding veterinary medicine’s reach with SIRVS

SIRVS is a group of veterinary students with a mission: to train future veterinarians by serving communities in need, offering clinics to provide veterinary services, including surgery, vaccinations, deworming, and animal care education, in reservation communities in Minnesota. Their first clinic in 2009 served 74 patients on the Leech Lake Reservation in northern Minnesota. Now, the organization’s 100 student members—approximately one-third of the veterinary student population—team up with volunteer veterinarians and veterinary technicians to host three clinics each year on the Leech Lake and White Earth reservations. Because the reservations are so large, they visit different communities each time, trying to reach the more remote areas that have fewer services.

Clinics generally last four days and offer physical exams, vaccinations, internal and external parasite treatment, testing for heartworm, anaplasmosis, ehrlichiosis, and Lyme disease, spay and neuter surgeries, and client education. Spay and neuter surgeries and emergency procedures are limited to the first three days to ensure that the veterinary team will be around for at least another day to monitor the patients. Because some locations especially need rabies vaccines, SIRVS sometimes offers a rabies vaccine-only station. The fourth day is mostly devoted to wellness exams and follow-up care.

Clients are usually waiting outside the door with their pets by 6 a.m., and the clinic runs from about 8 a.m. to 8 p.m., sometimes longer. At the end of each day, the group meets as a team to talk about what went well and what they can improve on the next day.

But this year, veterinary student Elizabeth Parks and fellow members of the Student Initiative for Reservation Veterinary Services (SIRVS) had other plans. Bundled in parkas, boots, hats, and mittens, they set off in a van on a 245-mile drive north through a Minnesota blizzard. They journeyed past Little Falls and Detroit Lakes to the White Earth Indian Reservation and out County Road 4 to the Naytahwaush Sports Facility. Along with about 24 other students, four veterinarians, and two veterinary technicians, they set up a makeshift clinic on the basketball court, where they would work, eat, and sleep for four days.

And they loved every minute of it.

STUDENT PROFILE

Elizabeth Parks

CLASS: 2014

HOMETOWN: Pasadena, California

STUDENT ORGANIZATIONS: president, Student Initiative for Reservation Veterinary Service

PROFESSIONAL GOALS: a one- to two-year mentorship in small animal practice; a career in small animal public health and preventive medicine
“Our goal is to improve each day, become more efficient,” says Parks, president of SIRVS.

All told, SIRVS has done more than 1,000 wellness exams and 250 spay and neuter surgeries.

“SIRVS gives us the opportunity to make a difference in the lives of a community and its animals while providing a novel educational experience to our veterinary students,” says faculty adviser Dr. Larissa Minicucci, veterinary public health program director. “Seeing the active learning and witnessing improved animal health is very inspiring.”

In addition to students, faculty, staff, and alumni, SIRVS is supported by organizations like Banfield Charitable Trust, which awarded the group a pet advocacy grant in 2012. Minicucci and the students are also able to share their experience with others in the profession. The 2013 Minnesota Veterinary Medical Association Annual Meeting included a presentation about SIRVS.

Through SIRVS, students get experience doing what they have been studying in school and learn practical skills that aren’t always part of the veterinary curriculum, like completing paperwork. A lot of clinical skills are used for the first time, and a lot of protocols are implemented for the first time for many team members, who quickly learn to think on their feet. Students can assist with surgeries one day and the next day do anesthesia, wellness exams, or post-surgical recovery.

“I learned so much in four days,” says Parks. “To get actual hands-on experience with what we learned in class was incredibly valuable.”

Reaching out with VeTouch

If any program embraces the concept of “it takes a village,” it’s VeTouch (Veterinary Treatment Outreach for Urban Community Health), a student-run nonprofit organization that provides basic veterinary care for the pets of low-income residents of the Twin Cities.

Dr. Vicki Wilke, a former assistant professor in the Veterinary Clinical Sciences Department, teamed up with Kelly Noyes, a veterinary technician, to establish the group in 2008. Kristy Lashbaugh, e-learning associate, thought up the name for the group, and VeTouch treasurer Nikko Poulos designed a logo. Some 94 students are involved—almost a third of the preclinical veterinary student body—and their membership fees help support VeTouch’s efforts. Faculty members also donate their time and veterinary services, as do a host of other veterinarians, veterinary technicians, and pre-vet students.

The community is engaged, too: Hennepin Avenue United Methodist Church provides the space for monthly VeTouch clinics, and members of its congregation donate funds and supplies. The Minnesota Veterinary Medical Foundation contributes financial support, Hill’s Pet Nutrition donates food, Boehringer Ingelheim Vetmedica provides vaccines, IDEXX Laboratories donates feline leukemia virus/feline immunodeficiency virus tests, and Novartis contributes heartworm tests and flea and heartworm medicine.

A VeTouch clinic is offered on the first Sunday of every month, when Hennepin Ave United Methodist Church hosts a meal for low-income residents of the community. VeTouch coordinates with this event to provide care to the pets of those attending the meal. The clinic officially opens at 3 p.m., but clients often start waiting in line at 11 a.m., filling the chairs lining the hallway outside the exam rooms in the church basement.

Working at each VeTouch clinic is a bustling team of 10-15 veterinary students, three to five veterinarians, three to five veterinary technician students and their veterinary supervisor from Globe (continued on next page)
VeTouch... (continued from previous page)

University, two or three pre-veterinary students from the University of Minnesota and the University of Wisconsin-River Falls, and several veterinary technicians and community volunteers.

Student volunteers provide free wellness exams, distemper and rabies vaccinations, diagnosis and treatment of parasitic diseases, education on zoonotic diseases, behavior education, nutritional support, and referral for more involved veterinary care. For spaying and neutering procedures, clients are referred to Kindest Cut, a service supported by the Animal Humane Society. Volunteer veterinarians assist students by confirming diagnostic plans, approving treatments, and providing mentorship.

By the time the clinic closes its doors at around 7 p.m., VeTouch has provided care for an average of 40-45 pets from about 30 families. At one especially busy clinic, a record number of 64 pets were examined. Since 2008, VeTouch has performed more than 1,000 exams.

In 2011, a volunteer’s efforts resulted in a donation to VeTouch from Blue Cross and Blue Shield of Minnesota as part of the Blue Cross Dollars for Doers program, which awards $250 to eligible nonprofit organizations for which a Blue Cross employee volunteers 40 hours or more per calendar year. The Blue Cross employee was Denise Abel, wife of then veterinary student Greg Closter. Abel donated more than 40 hours to VeTouch as a clinical intake specialist, assisting clients with paperwork, supplies, and other needs.

VeTouch faculty and students also share their knowledge with the veterinary community. At the 2013 Minnesota Veterinary Medical Association Annual Meeting, they made a presentation about VeTouch and led a panel discussion about how the veterinary profession can provide care to pets whose owners can’t afford the cost of care.

In addition to bringing veterinary care to pets who might otherwise not receive...
Want to help VeTouch?

Dues-paying veterinary students comprise most of the volunteer force, but community veterinarians, veterinary technicians, veterinary technician students, and pre-veterinary students are also welcome. Even if you have no veterinary experience, you can still support VeTouch. E-mail vetouch@umn.edu for more information. Make a gift online at https://makingagift.umn.edu/onlinegiving/enterOnlineGiving.do?owner=O_6379 or by mail to the College of Veterinary Medicine’s development office at 1365 Gortner Avenue, St. Paul, MN 55108.

Orphan Kitten Project

A registered veterinary student organization with over 50 volunteer members, the Orphan Kitten Project was originally founded as a group of foster parents dedicated to caring for abandoned nursing-age kittens. Orphan Kitten Project foster parents spend many days and nights bottle-feeding tiny kittens until Rescued Pets Are Wonderful, a nonprofit rescue organization, can find permanent homes for them. In 2012, Rescued Pets Are Wonderful found permanent homes for over 940 cats and kittens, about 140 of which came from the Orphan Kitten Project.

Working with VeTouch, students learn to be resourceful and adapt to the resources at hand, Wilke says. “It makes them think, ‘OK, these are my resources, and these are my client’s resources. How can we make the best use of these resources to help this animal?’”

While orphaned kittens comprise much of the Orphan Kitten Project’s work, the project’s foster parents now care for older cats and orphaned puppies, too. Want to be a foster parent or adopt an Orphan Kitten Project pet? Adoptions are facilitated through Rescued Pets Are Wonderful (www.rpaw.org), and all animals receive vaccinations and heartworm testing and are spayed or neutered prior to adoption. Interested volunteers can visit the Facebook page “Orphan Kitten Project UMN CVM” or e-mail the Orphan Kitten Project team at okpfosters@gmail.com. Donations of supplies or funding may also be discussed through that address.

it, VeTouch gives veterinary students and veterinary technician students the opportunity to gain valuable clinical experience while promoting the human-animal bond and establishing a veterinary-client-patient relationship.

“The goal is to give students experience and help the less fortunate at the same time,” Wilke says. “Students get experience doing exams, giving vaccinations, and talking with clients. And VeTouch’s work promotes urban community health and enhances the welfare of people and animals in Minnesota.”

STUDENT PROFILE

Jeanne Marie de Lyra

CLASS: 2015
HOMETOWN: West Islip, New York
STUDENT ORGANIZATIONS: vice president, VeTouch; president, Feline Medicine Club
PROFESSIONAL GOALS: small animal medicine, with the hope of becoming an American Board of Veterinary Practitioners certified feline practitioner

Orphan Kitten Project

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Study-abroad programs

There’s nothing like international study to broaden your perspective and expand your education. College of Veterinary Medicine students have traveled to many countries for experiential learning opportunities, and have benefited from generous philanthropic funding for international travel scholarships since 2004. Dr. Susan Miller, class of 2008, has worked with her family foundation, the Phileona Foundation, to provide ongoing, chance-of-a-lifetime travel grants for students to gain international experience. To maximize the educational value, travel scholarship recipients are required to participate in Opportunities in International and Cultural Immersion, a course in which students learn with each other about culturally relevant topics and international veterinary medicine. Every year, approximately 40 College of Veterinary Medicine students are awarded travel grants.

The many programs combining cultural immersion and veterinary medicine include:

**THE SPIRIT OF THAILAND PROGRAM.**
A collaboration with Chiang Mai University, Spirit of Thailand offers a variety of programs aimed at cultural immersion for American students. Dr. Karin Hamilton, analyst with the U.S. Agency for International Development-funded RESPOND project and ecosystem health fellow, recently co-led a Spirit of Thailand program focusing on public health. The program immersed students in Thai culture for three weeks, with a schedule that included visits to Chiang Mai University Veterinary Hospital, Heifer International, several hill tribe villages to see animal production and community health programs, an abattoir, an elephant camp with the Chiang Mai University Elephant Hospital, rural and city human hospitals to discuss zoonoses, a “sea gypsies” village to discuss public health, and a marine park to look at the interface of tourists and wildlife.

**THE AMERICAN FONDOUK ANIMAL HOSPITAL.** Located in Morocco, the American Fondouk provides free veterinary care to 50-100 animals per day. red-shanked doucs are a fascinating species, Clayton says. “They have specialized gastrointestinal systems, including a multi-chambered stomach and cellulolytic microorganisms in compartments of the GI tract,” he says. “These microorganisms play diverse roles in digestion and likely represent how the primates neutralize digestive inhibitors and toxins in plant materials, which constitute the majority of their diet.”

Plant materials like leaves make up the majority of their diet, but the monkeys also eat figs, buds, petioles, flowers, bamboo shoots, and seeds—a diet that’s hard to replicate in captivity.

Colobine primates are anatomically, physiologically, and ecologically unique, and successful maintenance of red-shanked doucs in traditional captive situations with the aim of breeding and repopulating restored...
Students study African wildlife in Botswana

For fourth-year veterinary students Abhishek Chatterjee and Joshua Montel, the summer of 2012 will always be one to remember: They traveled to Maun, Botswana, with the African Predator Conservation Research Organization, where they worked with hyenas, lions, leopards, and endangered African wild dogs.

“The coolest part was getting our hands on wild animals,” says Montel. “These are not zoo animals.”

“The lions are huge,” Chatterjee adds. “When they roar, your whole body vibrates.”

Their work was part of an ongoing research project focusing on the spread of canine distemper in both the African wild dog population and the lions of the area.

“It’s a very challenging trip, and you have to be up for the challenge,” Montel says.

And no wonder: most of the physical work was done at night, between 6 p.m. and 2 a.m. During this time, the team tracked and sedated as many carnivores—wild dogs, hyenas, lions, and even the elusive leopard—as they could spot. Once the animal was sedated, Chatterjee and Montel performed a thorough physical examination, followed by collection of various biological samples, including blood, feces, and parasites. The team then administered a reversal agent before retreating to the pseudo-security of their vehicles, where they monitored the recovery of each animal.

“We tried to be very careful with the safety of the animals,” Chatterjee says. “That’s something I’m really proud of.”

It was hard work. Many of the paths they traveled had been erased by floods and time, and when they ran out of bottled water halfway through the trip, things got a little interesting. Fortunately, a nearby river sufficed. There were other surprises, too: As Montel describes, “You would come back at 2 a.m., put the samples in the freezer, and then crash in your sleeping bag…and hope there were no snakes in your tent.”

Despite the challenges they faced—from raising funds to facing spitting cobras—Chatterjee and Montel agree that working with large carnivores is rewarding.

“We worked with every species of animal we had set out to, including the African wild dog,” Chatterjee says. Even a sighting of an African Wild dog is rare, as the species has been on the endangered species list since 1990.

“We learned a lot of valuable skills we’ll be able to use throughout our career,” Montel says. He and Chatterjee plan to continue their study of large carnivores and someday hope to found their own nonprofit research group. As Chatterjee explains, “It’s something we’re both passionate about.”

New this year is the College of Veterinary Medicine’s GoCam—a portable head-mount camera that allowed Chatterjee and Montel to record their every move. View a video about their experience at www.youtube.com/watch?v=auuK0Sb6YFw&feature=plcp.
The mission of the American Fondouk is to “provide people-to-people foreign aid on behalf of and through animals by providing free veterinary care, guidance on proper nutrition and handling, and compassionate care for the animals of Morocco and their owners.” The Fondouk strives to better the lives of all Moroccan animals, particularly working animals and the families who depend on their labor.

The Fondouk has hosted veterinary students from all over the world. Students in the last two years of their studies may spend two to four weeks at the Fondouk gaining hands-on experience. Students participate in case discussions and daily morning rounds of hospitalized patients, in addition to procedures and treatments of both hospitalized and day patients. Responsibilities include physical exams, administration of oral and injectable medications, lameness exams, bandage changes, nasogastric tube placements, and assisting with surgical procedures.

**Volunteers for Intercultural and Definitive Adventures (VIDA).**
VIDA provides high-quality spay and neuter field clinics in Central America in accordance with International Humane Society guidelines. It currently supports communities in Guatemala, Nicaragua, and Costa Rica. The program focuses mainly on the sterilization of cats and dogs in field clinics, but participants also get experience working with large animals. VIDA offers a program for pre-veterinary students, a program for first- and second-year veterinary students, and an advanced program for upper-level veterinary students and recent graduates.

**The Humane Society Veterinary Medical Association’s Rural Area Veterinary Services (RAVS).**
This nonprofit veterinary outreach program combines community service and veterinary education to bring free veterinary services to underserved rural communities where poverty and geographic isolation make regular veterinary care inaccessible. In 2012, the program’s six staff members and more than 400 volunteers provided veterinary care for animals in over 40 communities where no other animal services exist, including communities on Native American reservations throughout the United States, remote villages in Latin America, and around the world. Each year, RAVS provides nearly $1.5 million in free veterinary services to more than 8,000 animals, all at no cost to the clients or communities.

**Community Led Animal Welfare (CLAW).**
A branch of the International Fund for Animal Welfare, CLAW provides veterinary services to dogs and cats in some of the world’s poorest communities in South Africa, as well as animal care education to pet owners. Since its inception in 1999, CLAW’s mobile teams of veterinarians and community volunteers have treated, vaccinated, and sterilized thousands of pets. CLAW also provides other mobile services such as flea dipping, deworming, emergency care, adoption services, humane euthanasia, pet education, and community awareness events. CLAW programs are culturally sensitive and network with other community-based organizations to help provide an improved quality of life for the animals, as well as the people and communities in which they work.
Scholarships and fellowships: Fostering tomorrow’s veterinary leaders

As a veterinary student in Bogota, Colombia, it wasn’t long before Cesar Corzo realized that Colombian swine farms had numerous problems but few solutions.

“I started asking if there were any swine vets, and the answer was, ‘Yes, but too few,’” Corzo recalls. He responded by becoming a voracious reader of every journal article he could find about pigs and their diseases.

“A lot of information was coming out of the University of Minnesota, and I thought that this was the place I needed to go to learn,” Corzo says. “The University of Minnesota was on my radar since 1999.”

In 2011, Corzo was awarded the inaugural Dr. Sam Maheswaran Fellowship in Food Animal Health, which recognizes a PhD student of exceptional potential. It is only one of many fellowships and scholarships available through the College of Veterinary Medicine (CVM). In fiscal year 2013, the college awarded more than $80,000 in fellowships to promising graduate students.

This year, the college will also provide a record $472,000 in scholarships to veterinary students recognized for academic excellence, clinical proficiency, leadership and community service, and business aptitude. Some scholarships are targeted at supporting students in specific academic tracks, such as those working on a dual DVM and master’s of public health degree or those studying food animal medicine, an undersupplied area of veterinary medicine.

“Many veterinary students accumulate unimaginable debt, and scholarships play a significant role in decreasing that debt,” notes Bill Venne, chief development officer for the College of Veterinary Medicine. “With the new Fast Start 4 Impact program at the University of...
Corzo’s circuitous route to the University of Minnesota included a stop in Ontario, Canada, where he received a master’s degree at the University of Guelph. It was there that Corzo met Dr. John Deen, a University of Minnesota College of Veterinary Medicine professor who was visiting Guelph. Deen put Corzo in touch with Dr. Robert Morrison, another CVM professor who guided Corzo through the PhD application process at the college.

“Being honored with this award was even more important to me than getting the money, but the money—$10,000—helped a lot,” says Corzo, who finished his PhD in 2012 and now works for Tennessee-based PIC (Pig Improvement Company) as the firm’s Latin American health services manager.

One of the college’s quasi-endowed scholarships was established in honor of Dr. Colin Krog, class of 1978, by his sister Marcia Copeland and her husband, John. A quasi-endowment permits expenditures of both principal and earnings. The Class of 1978 Memorial Fund supports a junior or senior student in good academic standing who plans to practice large animal medicine.

A high school wrestler and football player, Krog grew up on a diversified farm near Ivanhoe in southwestern Minnesota.

“‘It was important for me to honor Sam. He was an excellent advisor, an excellent researcher, and a good representative of the college,’” Simonson notes. “And I wanted to do what I could to maintain my relationship with my alma mater. I am a strong proponent of education. Education provides hope for the hopeless.’”

Annual scholarships awarded to DVM students are provided through endowed or quasi-endowed scholarship funds that perpetuate a donor’s support of the college. With a minimum gift of $25,000, these endowment funds are often named in recognition of the donor or to honor a person of the donor’s choosing. The initial gift is left intact, while income generated provides ongoing awards to students.

In July 1984, while working, Krog was kicked in the abdomen by a sheep. As a result of that injury, he underwent an emergency appendectomy. A blood clot entered his right ventricle 12 hours post surgery, and he died at the age of 31.

Krog’s three siblings divided the memorial funds they received between two of his alma maters, Lake Benton High School and the University of Minnesota College of Veterinary Medicine. Copeland, who worked as the director of General Mills’ Betty Crocker Kitchens at the time, received a matching gift from her employer when the scholarship was established. Today, the scholarship fund has more than $53,000, and Copeland and her husband have left bequests in their wills to bring the fund above $100,000.

“I encourage people to give to the college,” says Copeland. “New graduates don’t make that much money, and many graduate with huge debt loads. We

Registered College of Veterinary Medicine student organizations

Alpha Psi
Behavior Club
Canine Club
Christian Veterinary Fellowship
CVM Student Council
Equine Club
Feline Medicine Club
Holistic Club
Orphan Kitten Project
Pathology Club
Production Animal Medicine Club
Queer and Allied Veterinary Medical Association
Research Animal Medicine Club
Shelter Medicine Club
Small Ruminant/Camelid Club
Student Chapter of the American Animal Hospital Association
Student Chapter of the American Veterinary Dental Society
Student Chapter of the American Veterinary Medical Association
Student Initiative for Reservation Veterinary Service
Student Society of Veterinary Surgery
VeTouch
Veterinary Business Management Association
Veterinary Emergency and Critical Care Medicine Club
Veterinary Student Supply
Zoological, Exotic, Avian, and Wildlife Medicine Club
should do whatever we can to foster them financially.”

This year’s recipient of the Class of 1978 Memorial Fund, Daylin Taylor, class of 2013, plans to practice equine medicine when she graduates.

“Just the fact that I received this award is such an honor,” says Taylor. “It means so much to me. I have worked so hard to get through this program. Being a veterinarian is my dream.”

Originally from the Los Angeles metro area, she plans to use the $2,500 award to help fund tuition, books, and living expenses. Taylor, who has paid for her education primarily through student loans, began an internship in June with the Vermont Large Animal Clinic in Milton, Vermont.

Dr. Dick Huston, class of 1963, has enjoyed a rich and successful career as both a large animal veterinary practitioner in Faribault, Minnesota, and a veterinary consultant. He and his wife, Glenda, endowed five scholarships at the alma maters of their children, as well as at the College of Veterinary Medicine, the University of Minnesota Medical School, and the Mayo Clinic.

The Richard V. Huston Scholarship Fund provides an annual scholarship to two full-time veterinary students. Half of the scholarship is awarded to a third-year student pursuing a career in bovine medicine and half to a talented first-year student pursuing a career in large animal medicine who is part of the Veterinary Food Animal Scholars Program (VetFAST), an early decision program that allows a student to complete both an undergraduate and DVM degree in seven years instead of eight.

“Food animal veterinarians are becoming scarce, so I want to encourage young people to go into that phase of the business,” says Huston.

This year’s recipients of the $6,000 Richard V. Huston Scholarship are Amy Dhalke, class of 2014, and Erika Fernholz, class of 2016. Fernholz, who is in the VetFAST program, is holding down two jobs while attending school and funding her education primarily through student loans.

“Growing up, I worked for dairy farms on and off,” says Fernholz, who is from Madison, Wisconsin. “When I was 18, I decided I wanted to pursue dairy medicine.”

Fernholz recently met Huston at a scholarship award presentation dinner.

“I thought he was an awesome guy, and a great person to represent the veterinary industry,” she says. “And I am really thankful that the VetFAST program has scholarships just for us, because production medicine is very important. I would love to set up a scholarship for production medicine students once I have paid off my student loans.”

As of June 30, 2012, the endowed Huston scholarship had grown to $146,000. Like Simonson, Huston was the first of his cousins to get a four-year college degree.

“I get to present a lot of the scholarships,” says Huston. “I tell the students they need to pay it forward, and I tell them when they move into their careers, they need to take a leadership role because they will be some of the brightest people in their communities.”

If you are interested in creating a scholarship or a fellowship, contact Bill Venne, chief development officer, at 612-625-8480 or venne025@umn.edu.

Erika K. Fernholz
CLASS: 2016
HOMETOWN: Madison, Wisconsin
STUDENT ORGANIZATIONS: member, production Animal Medicine Club; member and member of fundraising committee, Student Chapter of American Veterinary Medical Association; student member, American Association of Bovine Practitioners and Minnesota Veterinary Medical Association
PROFESSIONAL GOALS: Fernholz hopes to practice dairy production medicine, with a focus on calf and reproductive management. As a dairy vet, she wants to help dairy producers increase efficiency, profit, and the overall health of their livestock. Fernholz would also like to own her own farm one day, where she could work raising calves, perhaps also becoming a dairy consultant and possibly practicing part time.

Photo by Sue Kirchoff
**A day in the life**

**Collette Mendez**  
CLASS OF 2016  
TRACK/CAREER INTEREST Collette is interested in pursuing a career in mixed animal medicine.  
SPECIAL NOTES Collette serves as the philanthropy officer elect for the Student Chapter of the American Veterinary Medical Association (SCAVMA).  

**Jake Schwartz**  
CLASS OF 2015  
TRACK/CAREER INTEREST Jake is planning to focus on food-animal medicine, with an emphasis on swine medicine.  
SPECIAL NOTES A Minnesota native, Jake was the recipient of the 2012 Roberts Family Scholarship.  

**Tammy Oseid**  
CLASS OF 2014  
TRACK/CAREER INTEREST Tammy is a dual-degree DVM/MPH student with an emphasis in mixed animal medicine and a keen interest in public health.  
SPECIAL NOTES Tammy is the national president of the Veterinary Business Management Association (VBMA) and was the recipient of the 2012 Pfizer-AVMA scholarship in recognition of her efforts with the VBMA.  

**EARLY MORNING** Woke up to my alarm at 7 a.m., fed my animals, ate breakfast, and got ready for school. My husband dropped me off at school.  
8 A.M. Settled in for my first class of the day, Virology.  
10 A.M. After a short break, I returned to the classroom for another two-hour session of Virology. Normally we will have classes in one- or two-hour blocks, so having four hours of Virology in a row was unusual.  
NOON Attended a SCAVMA executive board meeting from noon-12:50 p.m. Grabbed a bite to eat and looked over my notes for our Organology class final at 1 p.m.  
2 P.M. Still in my Organology final; finished by 3 p.m. and went home.  
4 P.M. Took my dog for a walk, fed my animals, and took a study break with a friend.  
6 P.M. Attended a Merial presentation on heartworm prevention.  
8 P.M. Studied pathology in preparation for our Gross Pathology lecture exam the following day.  
10 P.M. Studied for the Gross Pathology lecture exam.  
MIDNIGHT Studied for the Gross Pathology lecture exam.  
LATE NIGHT Studied for the Gross Pathology lecture exam.  

**6 P.M.** Got home from the gym and made supper. At 7 p.m. began studying for a Clinical Pathology quiz and working on a Clinical Pathology assignment that was due the following day.  
8 P.M. Studied for the Clinical Pathology quiz.  
11:15 P.M. Called it a night.  

**EARLY MORNING** Woke up to the sound of my alarm clock at around 7:20 a.m., with just enough time to get dressed, grab something to eat, and brew a mug of coffee before rushing out the door at 7:45. Drove to campus, parked on Cleveland Avenue, and walked to the vet school from there.  
8 A.M. Met with my surgery group to discuss the responsibilities we would have the upcoming week in preparing our animal for surgery as well as post-surgery care.  
9 A.M. Sat in on my first Cardiopulmonary Disorders lecture of the day, covering cardiac arrhythmias in large animals.  
10 A.M. Sat in on my second cardiopulmonary lecture.  
11 A.M. Attended my first radiology lecture of the day, covering diseases of the canine reproductive tract.  
NOON Went to the student center to grab a bite to eat because I did not get up early enough to make lunch. Ate and studied for my Clinical Pathology class for the remainder of the noon hour.  
2 P.M. Our surgery animal arrived. We proceeded to do a physical exam on our dog (drew blood, ran a PCV and total protein, fecal flotation, etc.).  
3 P.M. Professional Development course.  
4 P.M. Attended professional development lecture. Went to the gym and worked out.  

**EARLY MORNING** Woke to a traditional alarm (followed by backup feline and canine alarms!) at 5 a.m. Worked on VBMA activities from 7:00-7:50 a.m., then got ready for my first day as a fourth-year student. Drove to school from downtown St. Paul.  
8 A.M. Started the Orientation to Clinics rotation, getting a welcome from Veterinary Medical Center director Dr. David Lee and an overview from small-animal surgeon and rotation coordinator Dr. Liz LaFond. Worked on rotation homework during breaks.  
10 A.M. Continued Orientation to Clinics, learning how to navigate and use UVIS, the hospital medical record system. Started UVIS homework during breaks.  
NOON Attended Equine Club meeting and worked on UVIS homework.
2 P.M. Continued in Orientation to Clinics until 3 p.m., learning how the small-animal hospital works and safety precautions for necropsy rotations. From 3 p.m. to 5 p.m., the mixed-, equine-, and food-animal track students learned what to expect from large-animal hospital-based rotations.

4 P.M. Finished up rotation homework and worked with classmates on other projects.

6 P.M. Attended a Merial presentation on heartworm, then drove home in an April snowstorm. Took my dog out for a walk in the snow and played with her briefly (never long enough for her!) before getting back to work.

8 P.M. Worked on VBMA business.

10 P.M. Worked on finalizing our class’s large-animal clerk-duty schedule, a volunteer project I have been working on since February.

MIDNIGHT Got ready for bed, then studied for the national board exam (which I will take in November/December) for 10 minutes. I try to squeeze in a few minutes of National Board studying every night. Went to bed about 12:30 p.m.

While my first day of my fourth year wasn’t exactly typical, no day in vet school really is. The variety is one of the things I love about it.

**Erik Holtze**

**CLASS OF 2013**

**TRACK/CAREER INTEREST** Erik’s studies led him through a track in mixed animal medicine. After graduation, he will be joining a small animal practice in Juneau, Alaska.

**SPECIAL NOTES** Erik has served as the president-elect and president of the Student Chapter of the American Veterinary Medical Association (SCAVMA). He was the recipient of the 2012 AVMA Professional Liability Insurance Trust scholarship.

**EARLY MORNING** Woke up at 5 a.m. to the sound of the baby banging on the door next to his crib. He had also woken up his brother, so we all went downstairs for breakfast. The three of us had breakfast together—bagels with cream cheese and a banana. Quietly woke up my wife when the coffee was ready. Took a shower, got dressed, and was at the hospital before 7 a.m. to do the morning treatments and assessment for my patient. I live close enough to walk to the hospital.

**8 A.M.** I’m currently on the surgery rotation, so from 8:30 a.m. we were in topic rounds—going over fracture management and options for fracture repair. 9:30-10:00 a.m.: case rounds. We went over all of the cases in the hospital, and a few of the upcoming cases for the day.

**10 A.M.** Scrubbed in as an assistant on an amputation surgery for a canine patient.

**NOON** Finishing touches on the surgery patient, and then recovery from anesthesia.

**2 P.M.** Ate a quick lunch of a peanut butter and jelly sandwich and called back the clients from the cases I’d seen the week before to see how things were going at home. Signed up for appointments the next day and went over the available referral information. Helped with a bandage change on a hospitalized dog.

**4 P.M.** Attended another set of case rounds to finalize the procedures that were done for the day and catch up on what was happening in the hospital. Briefed the doctors on the communication I had with clients. We talked through a very intensive wound management case. Got home around 5:30 p.m. for dinner.

**6 P.M.** Spent some playtime with the kids, then got everyone ready for bath time and bedtime. After the kids fell asleep, I went downstairs to finish up preparations for the case I would see the next day and do some research on the disease process suspected in that patient.

**8 P.M.** Finished up research regarding my case and responded to e-mails. Went to Target for groceries.

**10 P.M.** Finished grocery shopping and came home to put everything away. Had a quick meeting with my wife to go over the plan for the next day and the rest of the week so that we could coordinate our schedules. Did some painting on the walls of the apartment; they need to be white again before we move out.

**MIDNIGHT** In bed shortly after midnight.

“While my first day of my fourth year wasn’t exactly typical, no day in vet school really is. The variety is one of the things I love about it.”

—TAMMY OSEID
The choice of a career in veterinary medicine rarely stems from the desire to enter business. The vast majority of students choose veterinary medicine out of a desire to ease the pain and suffering of animals—regardless of species. But students who pursue business knowledge as part of their veterinary school experience are developing skills that could give them a competitive edge once they begin working in the field.

“You clearly need business acumen if you plan to open a practice,” says Brett Rabe, president of the Minnesota chapter of the Veterinary Business Management Association (VBMA), a student organization with branches at all U.S. and

**STUDENT PROFILE**

**Brett Rabe**

**CLASS:** 2015

**HOMETOWN:** Plymouth, Minnesota

**STUDENT ORGANIZATIONS:** president, Minnesota Chapter of Veterinary Business Management Association; vice president, VeTouch; member, Student Society of Veterinary Surgery, Veterinary Emergency and Critical Care Medicine Club, Student Chapter of the American Veterinary Dental Society, Student Initiative for Reservation Veterinary Service, and Student Chapter of the American Veterinary Medical Association; University of Minnesota College of Veterinary Medicine student ambassador

**PROFESSIONAL GOALS:** Rabe enjoys the crossroads of client interaction and medical care. His goal is to own a practice in the Twin Cities within four years of graduating. He views his role as delivering expert medical care to an animal on behalf of its owner for the well-being of both and anticipates being able to leverage his background in telecommunications to increase the electronic visibility and access of the clinics at which he practices.
Caribbean veterinary colleges as well as six international chapters.

Skills learned through participation in VBMA benefit not only those who eventually open their own clinics but also those who join established practices.

“If I were hiring an associate into my practice, I would want to hire someone who is aware that there is more to practice than diagnosing and treating patients—there’s a lot more to keeping the doors open than performing surgery,” says Rabe, who worked in business before enrolling in vet school. “There is a perception among practicing veterinarians that many new graduates want to practice medicine, but they don’t fully understand that it is also a business.”

A growing number of students, however, do have a solid handle on what it takes to run a practice, particularly those who have earned a national VBMA certificate. These students have achieved a level of business know-how that puts them one step ahead of their competition.

“A new, softer economy, increased price sensitivity among pet owners, and new alternatives are affecting demand for veterinary care,” says Dr. David Lee, hospital director of the Veterinary Medical Center and faculty advisor for the local VBMA chapter. “At the same time, decreasing state support and other factors are increasing tuition costs.”

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The business of veterinary medicine

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and, ultimately, student debt load. Now, more than ever, it is imperative that new entrants in the veterinary field have the practice management skillset they need to succeed.”

Lee coordinates the practice management curriculum at the college and helped develop an intensive two-year certification program for health professionals through the College of Continuing Education.

Nationwide, 4,400 veterinary students are VBMA members. It is the second largest student organization by membership after the Student Chapter of the American Veterinary Medical Association (SCAVMA), both in Minnesota and nationally, says Tammy Oseid, VBMA’s national president, and former president of the Minnesota chapter.

The Minnesota chapter currently has 254 members, or two-thirds of the college’s student body, and last year the club offered 28 hours of educational meetings. This year, the club is on pace to exceed that, says Oseid. One recent lecture drew about 150 students.

“It’s a great group of students,” says Lee. “The students are very motivated, they have a lot of energy, and they are very entrepreneurial.”

For years there was concern within the profession that students didn’t get enough exposure to the business aspect of veterinary medicine. The veterinary curriculum was already so full that many schools struggled to add practice management. Today, University of Minnesota veterinary students—who are required to take Lee’s course in their third year—can also self-select to polish their business skills by becoming VBMA members and working toward a certificate.

Oseid was instrumental in establishing the VBMA Business Certificate program at the college in fall 2011.

VetPAC: leaning on peers for academic support

W ith so much information coming at them every day, veterinary students must remain at the top of their game to make it through school. Sometimes even the brightest students struggle with a class. They might be burned out, they could have personal issues they are dealing with, or maybe a particular subject is not resonating with them. Some might even need a refresher on improving their time-management or study skills.

“The learning curve in vet school is a lot steeper than undergrad,” says Dr. Maggie Boerner, class of 2013. “Veterinary students have eight hours of classes a day compared with two hours in undergrad and take 30 credits a semester compared with 12 in undergrad.” Boerner worked as a VetPAC radiology coach in her last three years of veterinary school, helping an estimated 25 students who were having difficulty with the course.

VetPAC, a peer-assisted coaching service, provides free academic support to students struggling in a course by pairing them with other CVM students who are either currently excelling or who have excelled in that course earlier. The one-on-one and small-group tutoring sessions are designed to improve course competencies as well as study, test-taking, and time-management skills. As most veterinary students can attest, effective study skills are needed to make it through one of the most rigorous professional degree programs.

For instance, the average speaker covers 125-140 words per minute while the average note-taker writes fewer than 25 words per minute, says Deb Wingert, director of educational development and founder of the VetPAC program. Not having the skills needed to take good notes is a prescription for failure.

The success rate of VetPAC has been impressive.

“Since we launched the program in 2009-10, everyone who has participated has improved by at least a grade, and some students have seen a two-grade-level improvement, from a D to a B, for example,” notes Wingert.

How does VetPAC work? When a faculty member or the Office of Academic and Student Affairs sees that a student is struggling in a course—earning a D or F at midterm—they contact Wingert with the name of the student. Students who realize they are struggling in any course are also encouraged to seek VetPAC support independently.

“We strongly encourage students in need of assistance to sign up for at least three brief, tailored VetPAC sessions,” says Wingert. “Sometimes a student will come in the day before a test to request help, which sets everyone up for failure.”

VetPAC coaches receive brief training and are paid the standard hourly rate for student workers. Coaches meet with students in need for one to two hours per week at a designated time, typically in space provided in the Veterinary Medical Library. VetPAC coaches are also trained to note potential signs of distress unrelated to a student’s need for academic support. When this distress is noted, coaches contact Wingert, who then connects the student to appropriate forms of help. This past academic year, more than 30 students received one-on-one or small-group tutoring.
“It revolutionized our organization,” says Oseid. “It brought in more members and more programs.” For 2012, the Minnesota chapter ranked third nationally based on a series of metrics, such as total members and average hours attended.

The national VBMA Business Certificate can be earned at the gold level, which requires 30 hours of learning, or the silver level, requiring 15 hours. To earn a certificate, students are required to complete a minimum of two hours in each of five categories: finance, practice ownership, business operations and management, employee management and leadership, and career path preparation.

Through March 2013, at least 32 VBMA members at the college had attended 30 or more hours of business education—the equivalent of a two-credit class—and the average number of meeting hours for students seeking a certificate exceeded 16.

“Overall, we have provided about 3,550 hours of business education to 217 students in the last two academic years,” says Oseid.

No doubt, VBMA produces well-rounded veterinary professionals who have demonstrated a keen interest in business, but the true test will come when the first VBMA business-certified students enter the job market.

“Obtaining the certificate sets VBMA members apart from the other graduates,” notes Lee. “It prepares them to be better associates, produce for the practices they join, and work in medical teams.

Employers should be looking for grads who have gone the extra step.”

As president, Rabe hopes to begin the process of more clearly defining the programming delivered to each member. “I’d like us to be able to say, ‘Here’s the standardized content that we deliver on a rotating three-year cycle, and here’s why each and every piece of programming is important for your business education.’ I’d like to tighten up the curriculum,” he says.

And that’s spoken like a true business professional.

VetPAC also offers a walk-in service at the Veterinary Medical Library from 4 to 8 p.m. on Tuesdays and Thursdays.

“Students can just walk in to receive academic support in any course or any skillset from a trained VetPAC coach who is onsite,” says Wingert. Because the walk-in service is voluntary, many of the students requesting help are not referred through other VetPAC channels.

“My concern is that some of the students receiving help through VetPAC, particularly those who received a midterm deficiency notice indicating they are currently receiving an F or a D in a particular course, would have failed or dropped out had it not been for the help they received through peer-assisted coaching,” says Wingert.

A peer-assisted approach to tutoring students in need lets them know they are not alone.

“You can reassure them that it is not a big deal that they are having trouble and that everyone needs help in one course or another,” says Boerner. “We are all here to help each other out.”

Another reason VetPAC is so successful, according to Boerner, is that it teaches students that it is not a disgrace to get Bs and Cs.

“By nature, many vet students are overachievers. In undergrad, we all excel to get straight As so we can get into vet school,” she says. “But the bottom line is the grades you get in vet school are not going to affect how good you are at practicing veterinary medicine once you graduate.”
Summer Scholars: immersed in cutting-edge research

This summer, 20 veterinary students immersed themselves in cutting-edge research. Through these experiential learning opportunities offered through the Summer Scholars program, these first- and second-year students gained an appreciation of research while learning firsthand how it contributes to advances in health care and veterinary practice. Some will even decide to pursue a research career.

“I knew I was interested in a career in research, but I wasn’t completely sold on it,” says Katie Anderson, a participant in the 2012 Summer Scholars program. The eight weeks Anderson spent on her Summer Scholars project, however, convinced her to commit to a career in research. Anderson’s project looked at the role interleukin 8 plays in hemangiosarcoma development in the lab of Dr. Jaime Modiano, Perlman professor of oncology and comparative medicine at the college.

“Interestingly, I’d like to combine bench-top research with clinical research. My goal is to design a therapy in the lab and translate that therapy into the clinic,” says Anderson. “I love the idea of exploring the unknown and examining a problem we are facing in veterinary medicine and then coming up with a solution. I love the problem-solving aspect of research.”

Veterinarians play an increasingly important role in developing new treatments and cures for all animals, including humans, through comparative medicine and the animal model of human disease. The goal of the Summer Scholars program is to develop veterinary scientists skilled in hypothesis-driven research and translational medicine by immersing students in research projects related to veterinary, animal, and human health initiatives.

“We are not graduating enough veterinarian scientists to meet industry and academic research needs, particularly with the pending retirement of the baby boomers,” says Dr. Mark Rutherford, associate dean of graduate programs and associate professor in the Veterinary and Biomedical Sciences Department, who directs the Summer Scholars program. Veterinary research scientists also play a critical role in addressing basic health issues in human biomedicine, veterinary health, and wildlife ecology.

“Participation in the Summer Scholars program helps students be more competitive as PhD candidates, provides them with a first exposure to research as a possible career, and strengthens their applied knowledge of the science behind the medicine,” says Rutherford.

Students who participate in the program receive a $4,500 stipend; gain experience in how to plan and implement a research project, evaluate data, and work effectively in a research lab; and develop critical thinking skills. They also become aware of various careers in industry, government, and higher education.

“A career in academia allows veterinary research scientists to be engaged in teaching vet students at the same time they are involved in research,” says Rutherford. “They also have time in the hospital, where they can see and treat patients. A career in academia is probably the best of both worlds.”

Opportunities in industry include careers with biomedical and medical device firms, animal health companies, and veterinary or human pharmaceutical firms.

Students interested in the program apply for specific projects, which have been approved for the Summer Scholars program by a committee that has already determined a project’s value as a learning opportunity. Students applying for the program also must demonstrate through a one-page paper that they understand both the research question and the research approach of their selected project.

Each year, the number of positions available in the Summer Scholars program is determined by funding. The National Institutes of Health funded five projects this year through a grant to Bruce Walcheck, PhD, professor in the Veterinary and Biomedical Sciences Department. Merial, an international animal health company based in Duluth, Georgia, provided funding for four projects, which the college matched. The remaining seven projects were funded by a variety of sources.

“There is more interest than there are funds,” says Rutherford. “We are always piecing together the funding, but this is our 13th year in the program, and we have successfully received funds from Merial for 13 years.”

While a majority of participants in the program are from the college, this year the college will host one veterinary student from St. George’s University in Grenada, West Indies, and one from Utrecht University in the Netherlands.
Student council: providing a bridge for students and faculty

Andy Kryzer, class of 2015, didn’t waste any time getting involved in student government. As a second-year veterinary student, he became president of the student council. Now one of 16 elected council members, he excels at relating to his fellow students, as well as to professors, department heads, and college administrators.

Council members act as representatives of the college’s DVM student body to the Graduate and Professional Student Assembly, the Academic Health Center, the St. Paul Board of Colleges, the University of Minnesota, and the public at large.

The council has four main purposes: serving as a liaison between the administration of the College of Veterinary Medicine and veterinary students; providing a forum for both academic and extracurricular student concerns; organizing philanthropic events for worthwhile veterinary medical student associations; and providing social activities and events for fellow students.

“We hold regular meetings with department chairs to cover any big issues, and we look for ways to create new programs and social events so that students can enjoy a well-rounded education,” says Kryzer. The student council also meets every other week to discuss strategy, events, and issues.

“The student council is perceived as—and functions as—an unbiased group of student representatives to help us understand any issues or problems that arise,” says Dr. Laura Molgaard, associate dean for academic and student affairs. “The council acts both proactively and reactively as issues come up.”

One recent accomplishment of the council was to lend advice in the establishment of a noon-hour plenary session called Case Presentations From Basic Science to Clinical Medicine. During this session, several faculty members from various disciplines presented a case study, providing information and questions tailored to each class level in attendance. The student council gave input in the planning stages as well as valuable feedback on student perceptions of what worked and what could be done to enhance future sessions.

The council also provides a forum for students to interact with each other and with faculty in a social setting. This past February, for example, the council rented 20-plus lanes at Flaherty’s Arden Bowl in Arden Hills, Minnesota. The four-hour event drew a crowd.

“We made sure it was low-cost to attract a large number of students,” says Kryzer. “And we made sure that on each lane there were both students and faculty, so the faculty could share their personal experiences, challenges, and successes of attending veterinary school.”

By interacting with faculty members, Kryzer says, students can learn more about which academic track they want to pursue: food animal, small animal, mixed animal (including wildlife, zoo, and exotic), equine, or research/public health.

“Determining which academic route to take can be a real challenge,” says Kryzer. “Having an opportunity to talk to and get to know faculty who can offer suggestions and talk about their research can stimulate a student to pursue a specific academic track.”

In April, the council hosted a barbeque for approximately 300 people as part of Student Appreciation Week.

“The barbeque was the student council’s idea,” says Molgaard. “They really wanted to host a fun event to allow students and faculty to have another opportunity to interact in an informal setting.”

While the council advocates for student needs, Molgaard says the students on the council are true liaisons. “They do a great job by acting in a cooperative and supportive role,” she says. “They work to understand the issues and to find solutions. Then they work with us for the best interest of both the faculty and students.”
Faculty adopts new curriculum
College of Veterinary Medicine faculty voted to adopt a proposed faculty-generated curriculum in March. The new curriculum will be implemented semester by semester, beginning in fall of this year for the entering first-year class.

First Leman China Swine Conference draws 650 people from 10 countries
The first Leman China Swine Conference was held on October 15-16, 2012, at the Sofitel Hotel in Xi’an, China. The conference hosted 650 people representing over 100 companies from 10 countries, as well as 25 exhibitors and a poster session.

The two-day meeting covered a variety of topics related to pig production, disease management, and nutrition, as well as panel discussions delivered by 15 speakers from North America and China. Among its goals were to promote the University of Minnesota’s missions of education, research, and outreach by providing science-driven solutions to the global swine industry and to enhance the College of Veterinary Medicine’s global reputation in swine education and research. Proceeds from the event will be allocated to graduate education in the United States and China. Led by Frank Liu, Leman-China coordinator, and Bob Morrison, program chair, the organizing committee aims to make Leman China an annual event. The 2013 conference is planned for October 13-15.

Minnesota Veterinary Institute launched
The University of Minnesota College of Veterinary Medicine, Minnesota Veterinary Medical Association, and Veterinary Hospitals Association have teamed up to launch the Minnesota Veterinary Institute (MVI).

MVI will offer comprehensive continuing education programs for veterinarians and veterinary technicians, including lectures, wet labs, online interactive case studies, and other content that can immediately be put to use in a veterinary practice.

The institute’s first series, to be coordinated by Drs. Gary Goldstein and Kevin Stepaniuk of the Veterinary Medical Center’s Dentistry and Oral Surgery Service, will focus on dentistry and oral surgery, including oral pathology, feline dentistry, canine oral surgery, emergency dentistry, and more.

Collaborators awarded $3.7 million for HIV/AIDS research
Pam Skinner, PhD, associate professor in the Veterinary and Biomedical Sciences Department, and longtime collaborator Liz Connick, MD, professor in the University of Colorado School of Medicine Division of Infectious Diseases, have been awarded a five-year research grant totaling more than $3.7 million from the National Institutes of Health. Ultimately, their research could contribute to the development of a protective vaccine or cure for HIV-1, the most common and pathogenic strain of HIV (human immunodeficiency virus), the virus that causes AIDS.

“In a nutshell, we have found that HIV and simian immunodeficiency virus (SIV)-infected cells are concentrated in lymphoid tissues within B cell follicles, whereas HIV/SIV-specific CD8 T cells—whose job it is to track down and kill virus-infected cells—are concentrated outside of B cell follicles and are unable to clear the reservoir of virus-producing cells inside of B cell follicles,” Skinner says.

The research will set out to determine mechanisms underlying HIV/SIV concentrating inside of B cell follicles and provide a wealth of new information on the cells that foster HIV-1 replication in B cell follicles. Factors that may promote or impair lentivirus replication will also be explored. The project, titled “Mechanisms Underlying Persistent Lentivirus Replication in Follicular T Cells,” started December 1 and will continue for five years.

Researchers find that seeds from box elder tree cause muscle disease in horses
Dr. Stephanie Valberg, professor and director of the University of Minnesota Equine Center, and a team of researchers have discovered that a toxin in the seeds of the box elder tree cause seasonal pasture myopathy in horses. Seasonal pasture myopathy, or atypical myopathy, is a devastating equine muscle disease that is fatal in more than 90 percent of cases. Until now, veterinarians and researchers have not known what caused the disease, which is often confused with colic or founder.
AROUND THE COLLEGE
(continued from previous page)

What’s killing Minnesota’s moose?
College of Veterinary Medicine faculty, students, and alumni are working with
the Minnesota Department of Natural Resources to find out
Minnesota’s moose population has dropped by 52 percent since
2010, and no one knows why. But the Minnesota Department of
Natural Resources (DNR) is working with collaborators at the
University of Minnesota College of Veterinary Medicine (CVM)
to find out, conducting an investigation into the species’ decline.

More than 100 moose in northeastern Minnesota were fitted
with satellite tracking and data-collection collars designed to
help root out the causes of rising moose mortality. The collars
allow researchers to track the animals, collect other data, and
get to them quickly in the event of mortality in an effort to better understand the cause
of the decline. Each collar has a transmitter
that alerts researchers
if the moose hasn’t
moved in six hours,
a likely sign that it’s
dead. In 27 of the
moose, researchers inserted an implant that monitors vital signs,
including temperature and heartbeat, and alerts researchers if the
animal’s heart stops beating.

Thanks to funding from the Environmental and Natural
Resources Trust Fund, the $1.2 million project is using the latest
technology and an unprecedented amount of DNR staff to learn
more about moose mortality, building on research that is ongoing
or planned by other agencies and universities. A number of
University of Minnesota College of Veterinary Medicine faculty,
students, and alumni are involved with the effort, including—

Drs. Anibil Armien, associate clinical specialist, and Arno
Wuenschmann, associate professor, of the Veterinary Diagnostic
Laboratory, who are integral to the project

Dr. Erika Butler, DNR wildlife veterinarian, a 2006 graduate
of the college who is heading up the project

Dr. Michelle Carstensen, DNR wildlife health program
supervisor and adjunct assistant professor in the Veterinary
Population Medicine Department, who collaborates on numerous
projects between the DNR and CVM

Kaytee Firnett, a fourth-year veterinary student at the College
of Veterinary Medicine, who is doing an externship with the DNR

Dr. Larissa Minicucci, veterinary public health program
director, who trained staff on placement of the mortality implant
transmitters, which are similar to magnets placed in cattle

Dr. Jed Overmann, assistant clinical professor, who is
helping to interpret the clinical pathology results

Veterinary Medical Center officially designated as
veterinary trauma center; is AAHA-accredited
The University of Minnesota Veterinary Medical Center
(VMC) was one of nine veterinary hospitals and clinics in
the U.S. to be provisionally designated as Veterinary Trauma
Centers by the American College of Veterinary Emergency and
Critical Care (ACVECC) in an initiative designed to improve
treatment outcomes of animal trauma cases. The Veterinary Trauma Center
designation is part of an effort by
the ACVECC Veterinary Committee
on Trauma (VetCOT) to create a
network of lead hospitals that will
seed development of trauma systems
nationally. These hospitals will work
collaboratively to define high standards
of care and disseminate information that improves trauma
patient management efficiencies and outcomes. Dr. Kelly Hall,
coordinator of the VMC’s Animal Trauma Center and chair of
VetCOT, worked closely with her colleagues to build on the
Minnesota model and develop standards that will identify and
guide veterinary trauma centers nationally.

The VMC also celebrated its American Animal Hospital
Association (AAHA) accreditation in April. The AAHA is an
international association of more than 42,000 veterinary care
providers who treat companion animals. Approximately 3,200
veterinary hospitals participate in the AAHA hospital evaluation
program, in which hospitals are evaluated on 900 standards in the
areas of quality of care; diagnostic and pharmacy; management;
medical records; and facilities.

Researchers awarded grant
to study costly pig disease
The U.S. Department of Agriculture (USDA) has awarded a five-
year, $3-million grant to a team of researchers to study genetic
resistance to porcine reproductive and respiratory syndrome
(PPRS). In addition to researchers at Iowa State University, the
collaborative effort includes Drs. Montse Torremorell and Bob
Morrison from the University of Minnesota College of Veterinary
Medicine and researchers at Kansas State University, the USDA,
the Roslin Institute in Scotland, and industry. PRRS is a viral
disease that causes significant economic losses for North American
swine producers due to reproductive failure in older pigs as well as
respiratory and other signs of ill-thrift in younger pigs.

College presents Dairy Appreciation Award
to Paul and Barb Liebenstein
The college honored Paul and Barb Liebenstein, owners of Wolf
Creek Dairy in Dundas, Minnesota, with the Dairy Appreciation
Award during the Minnesota Dairy Health Conference at the
Minneapolis Airport Marriott May 21-23. The Liebensteins were
recognized for their outstanding contributions to the dairy industry
and for supporting the college’s education and research missions.
Dr. Will Hueston was presented with an honorary doctorate in veterinary medicine by Her Royal Highness Princess Maha Chakri Sirindhorn at Chiang Mai University in Thailand.

Awards and accolades
The Association of American Veterinary Medical Colleges (AAVMC) awarded the 2013 AAVMC Senator John Melcher DVM Leadership in Public Policy Award to Dr. Will Hueston, executive director of the Global Initiative for Food Systems Leadership and Endowed Chair in Global Food Systems Leadership in the University of Minnesota College of Veterinary Medicine and School of Public Health. The award was presented at the AAVMC’s 2013 Annual Conference in Alexandria, Virginia, March 8.

Hueston was modest about the honor.

“Actually, all the recognition should go to the wonderful team we have here at the College of Veterinary Medicine and School of Public Health,” he said. “It takes a village!”

In January, Hueston received an honorary doctorate in veterinary medicine from Chiang Mai University (CMU) in Thailand. The degree was presented by Her Royal Highness Princess Maha Chakri Sirindhorn at the public research university’s annual graduation ceremony, where 5,000 undergraduate and graduate students received their diplomas.

“I personally felt that I received the honor on behalf of the University of Minnesota One Health team in veterinary medicine, public health, nursing, and medicine — and the absolutely fantastic One Health team at Chiang Mai with whom I’ve had the honor to collaborate over the past four years, including faculty members in veterinary medicine, nursing, medicine, and economics,” Hueston says. “Together we’ve led several workshops for CMU and supported its development of a public health residency and international MPH program. Furthermore, we’ve contributed to CMU’s receipt of funding from both Rockefeller Foundation and USAID through the RESPOND project.”

Dr. Sheila Torres, associate professor in the Veterinary Clinical Sciences Department, and Dr. Lucy Vulchanova, assistant professor in the Veterinary and Biomedical Sciences Department, were selected as two of the first recipients of a Zoetis Excellence in Dermatology research grant. They will receive funding of $26,750 to support their proposal, “A New Drug Target for Improved Epidermal Barrier Function in Atopic Dermatitis.” The other recipients were investigators from the University of Pennsylvania and Johns Hopkins University, who will receive a grant to pursue collaborative research in *Pseudomonas* otitis in dogs. The objective of the new program is to support research in the area of basic science diagnosing and treating dermatologic conditions in dogs and cats. Zoetis Inc., was formerly the animal health business unit of Pfizer, Inc.

Dr. Robert Washabau, professor and chair of the Veterinary Clinical Sciences Department, received a University of Minnesota Award for Outstanding Contributions to Postbaccalaureate, Graduate, and Professional Education. Recipients are chosen for excellence in instruction; involvement in students’ research, scholarship, and professional development; development of instructional programs; and advising and mentoring of students. Past recipients from the College of Veterinary Medicine include Drs. Peggy Root Kustritz (2011), Al Beitz (2010), Tom Molitor (2007), Carl Osborne (2005), David Hayden (2002), and Bob Hardy (1999).

The Board of Governors of the American Association of Veterinary Immunologists (AAVI) named Dr. Michael P. Murtaugh, professor in the Veterinary and Biomedical Sciences Department, the AAVI Distinguished Veterinary Immunologist for 2012.

Dr. Fekadu Kassie, assistant professor with the Masonic Cancer Center and research faculty member with the Animal Cancer Care and Research program, has been awarded a two-year grant from the National Institutes of Health. The project, “Diindolylmethane: Inhibition of Lung Squamous Cell Carcinoma by Targeting AKT,” was awarded $363,660. The research will examine the efficacy of diindolylmethane, a constituent of vegetables, to combat lung cancer, the leading cause of cancer deaths.

Dr. Carl Jessen, retired professor and current treasurer of the Minnesota Veterinary Historical Museum, received the Veterinarian of the Year Award and Dr. Stephanie Valberg, professor and director of the University of
Minnesota Equine Center, was honored with the Outstanding Faculty Award at the Minnesota Veterinary Medical Association Conference on February 8.

Clinical pathology resident Dr. Jill Schappa was selected as one of five canine research fellows at colleges of veterinary medicine around the United States. The American Kennel Club Canine Health Foundation provides each fellow with $10,000 to continue canine research projects and $2,000 to travel to a national conference and present findings. Schappa’s research is investigating the protective effects of exercise on the bone marrow after treatment with radiation and chemotherapy.

**Appointments**
The College of Veterinary Medicine has tapped Shaun Kennedy to promote the college’s work in the University-wide initiative related to global food security. An associate professor in the Department of Veterinary Population Medicine, Kennedy will help map food and nutrition strengths across the University and encourage new collaborations that bring together experts from diverse fields to spur creativity and innovation in tackling complex food and nutrition issues ranging from food safety to obesity.

Trained as a chemical engineer, Kennedy was previously director of the National Center for Food Protection and Defense (NCFPD), and before that, associate director of the Center for Animal Health and Food Safety. He was recruited to the University from the food industry, where he was vice president for global food and beverage research at Ecolab. Prior to that, he worked in Japan and China for Proctor and Gamble. Food Safety News recently included Kennedy on their list of the best in food safety in education.

Amy Kircher, associate director, was appointed acting director of the NCFPD.

**IN MEMORY: John Ohlfest**
Dr. John Ohlfest, a researcher with the Masonic Cancer Center, member of the Animal Cancer Care and Research program, and associate professor in the Medical School’s Departments of Neurosurgery and Pediatrics, died of melanoma on January 21 at age 35. Well-known at the college for his work with the canine brain tumor clinical trials program, Ohlfest designed new treatments for human and canine brain cancers, collaborating with Dr. Liz Pluhar and other colleagues and employing more than 15 staff in his research lab.

Ohlfest earned his PhD at the University of Minnesota in 2004 working on gene therapy approaches to treating malignant gliomas. He joined the faculty of the Department of Neurosurgery in 2005 and led its gene therapy program and gene and stem cell core facility.

**IN MEMORY: Ashley Robinson**
Robert Ashley Robinson, BVSc, MPH, PhD, one of the college’s pioneers in One Health, died at his home in New Zealand on May 20. Robinson retired from a 20-year faculty career in veterinary epidemiology and public health at the University of Minnesota College of Veterinary Medicine in 1997. For the next 18 months, he worked for Tufts University and lived in Jordan as a liaison for the United States Agency for International Development’s Middle East Regional Cooperation Project. The project was part of the peace process and involved veterinarians from Egypt, Israel, Jordan, and the Palestinian authority working together on regional animal disease problems.

“While humans understand lines in the sand, unfortunately animals don’t recognize those international barriers,” he said.

A native of New Zealand, Robinson earned his bachelor’s degree in veterinary science from the University of Sydney in Australia, and his master’s in public health and doctorate in veterinary microbiology from the University of Minnesota. He lectured at universities, symposiums, and conferences in Thailand, Morocco, Italy, Vietnam, Kenya, and Trinidad.

**Faculty members promoted**
Congratulations to the following faculty members on their recent promotions:

**Veterinary and Biomedical Sciences**
- Connie Gebhart, promoted to professor
- Timothy Johnson, promoted to associate professor with tenure
- Hinh Ly, associate professor with tenure

**Veterinary Clinical Sciences**
- Margaret Duxbury, promoted to associate clinical professor
- Sandra Koch, promoted to associate clinical professor
- Sheila Torres, promoted to professor with tenure

**Veterinary Population Medicine**
- Ricardo Chebel, promoted to associate professor with tenure
- Anna Firshman, promoted to associate clinical professor
- Erin Malone, promoted to clinical professor
- Molly McCue, promoted to associate professor with tenure
- Erik Olson, promoted to associate clinical professor
STUDENT NEWS

Doctoral candidate Nichol Schultz was named the 2012 American Association of Equine Practitioners (AAEP) Foundation Past Presidents’ Research Fellow at the AAEP meeting on December 3. The $5,000 grant is awarded each year to a doctoral or residency student who has made significant progress in the field of equine health care research. Nichol’s thesis project is focused on the epidemiology and genetic basis of equine metabolic syndrome. Her advisors are Drs. Molly McCue and Jim Mickelson. Past winners of the AAEP Past Presidents’ Research Fellow award include Dr. Annette McCoy (2011), and Dr. Carrie Finno (2010).

Katie Anderson, class of 2015, was chosen from a group of 250 applicants to receive one of 68 Howard Hughes Medical Institute (HHMI)-Burroughs Welcome Fund research fellowships. The one-year award for full-time research will allow Anderson to attend the National Institutes of Health/Merial Veterinary Scholars Symposium under the sponsorship of the Burroughs Wellcome Fund in 2014. She will also attend the Medical Fellows end-of-year scientific meeting at HHMI headquarters in Chevy Chase, Maryland, and have the opportunity to participate in Medical Fellows regional group events and attend an HHMI science meeting with HHMI investigators. Anderson was a 2012 Summer Scholar, working with Dr. Jaime Modiano on the project “The Role of IL-8 in Hemangiosarcoma Growth and Differentiation.”

Chris Thomson, a second-year veterinary student, is the first University of Minnesota student to be awarded the Americans for Medical Progress Michael D. Hayre Fellowship in Public Outreach. Thomson’s program will focus on student-to-student outreach at veterinary schools and conferences across America.

Through campus presentations, workshops, and media initiatives, he will build and maintain informed understanding and acceptance of the importance of animals to biomedical research. The project, “The Veterinary Impact,” will also feature a website and series of posters.

The American College of Veterinary Surgeons has awarded a Surgeon-in-Training Research Grant to Dr. Dane Tatarniuk, a first-year resident in large animal surgery and master’s student in the veterinary medicine graduate program, for the project “Concentrations of Cytokines and Matrix Metalloproteinases in Serum and Synovial Fluid Following Injection of Autologous Conditioned Serum into Equine Osteoarthritic Distal Inter-Phalangeal Joints.” Tatarniuk is working on the project with Dr. Troy Trumble, associate professor.

The American Association of Swine Veterinarians (AASV) Foundation awarded scholarships totaling $25,000 to 15 veterinary students during the 44th AASV Annual Meeting in San Diego in March. The recipients included four University of Minnesota students: Anne Duquette and Sam Holst, who received $1,500 scholarships, and Jacob Schwartz and Katherine Wedel, who received $500 scholarships. Altogether, 65 veterinary students representing 14 universities submitted

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STUDENT NEWS
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70 abstracts for consideration. From those submissions, 15 students were selected to make presentations at the annual meeting. A panel of judges selected the scholarship recipients on the basis of communications skills in the writing of the abstract and the presentation of the case report and on applicability of the research to swine medicine.

The American Association of Bovine Practitioners (AABP) has selected Amy Dahlke, Andrew Kryzer, and Abigail Wirt to receive AABP Bovine Veterinary Student Recognition Awards. The students will be recognized at the opening ceremonies of the 46th Annual Conference of the AABP in Milwaukee September 19-21, where they will each receive an award of $1,500. Last year, Wirt was one of nine veterinary students from around the country to be awarded an Amstutz Scholarship by the AABP. Dahlke received first-place honors at the student case/research presentation competition at the annual AABP conference.

Sara Losinski, class of 2013, received a University of Minnesota President’s Student Leadership and Service Award at the 2013 President’s Student Leadership and Service Awards on May 1. The award, which recognized Sara’s role in two CVM outreach programs, SIRVS (Student Initiative for Reservation Veterinary Service) and VeTouch, is presented to approximately 0.5 percent of the student body for exceptional leadership and service to the University and the surrounding community. University of Minnesota President Eric Kaler presented the awards to 30 students on May 1.

ADVANCEMENT

Minnesota Urolith Center celebrates 750,000 stones—and renewed support from Hill’s

The Minnesota Urolith Center has two things to celebrate: the receipt of its 750,000th urolith—a struvite-calcium phosphate carbonate stone from a female Pomeranian in Glen Burnie, Maryland—and renewed support from Hill’s Pet Nutrition. In November, Hill’s chief veterinary officer, Dr. Janet D. Donlin, presented Drs. Jody Lulich and Carl Osborne with a $500,000 check to renew its longtime support of the center.

Founded in 1981, the Minnesota Urolith Center maintains the largest database of animal uroliths, analyzing nearly 80,000 samples annually. This diagnostic service, offered at no cost to veterinarians, is made possible largely by a philanthropic educational grant from Hill’s Pet Nutrition. Last year alone, Hill’s contributions are estimated to have saved the veterinary profession approximately $2.5 million in diagnostic fees. The longstanding financial commitment from Hill’s also supports the Minnesota Urolith Center’s scientific and epidemiological research needed to understand trends, risk factors, and treatments for urinary tract disease.

Lulich and Osborne think that the synergistic partnership between Hill’s Pet Nutrition and the Minnesota Urolith Center is an example of what can be done for veterinary health care teams who need assistance with their canine and feline urinary tract disease case management.

“In the beginning of the last decade, we were receiving approximately 25,000 samples per year,” says Osborne. “Last year, we saw nearly 80,000 from around the world. With the help of sponsors like Hill’s Pet Nutrition, we’re helping pets around the world have a better quality of life.”

In addition to quantitative urolith analysis using infrared spectroscopy and optical crystallography, the Minnesota Urolith Center holds a database of more than 750,000 veterinary samples and epidemiologic data identifying risk factors for urolithiasis and provides recommendations, consultation, clinical studies, and lectures around the world. Funding for the Minnesota Urolith Center’s scientific and epidemiological research comes largely from donors.

Anonymous donor gives $225,000 for VetFAST

An anonymous donor gave $225,000 to the College of Veterinary Medicine to support the VetFAST program. The donors, a couple from rural Wisconsin, were grateful clients who are concerned about the lack of veterinarians in rural areas. VetFAST scholarships support veterinary students committed to working in rural areas after graduation.
In 2012, epidemiologist Dr. Barbara Knust was called to investigate an outbreak of lymphocytic choriomeningitis in the United States after the virus was discovered at a mouse breeding facility, where workers had become ill. The facility had shipped mice that were potentially infected with the virus to 21 states.

Soon after beginning work on that outbreak, Knust’s team received word that there was an Ebola outbreak in Uganda and help was needed there.

“We were in the midst of dealing with a large outbreak of lymphocytic choriomeningitis stateside, and almost immediately we had to turn our attention to the Ebola outbreak in Uganda, the first outbreak there in several years,” says Knust, an epidemiologist with the Viral Special Pathogens Branch of the Centers for Disease Control and Prevention (CDC) and a former veterinary public health fellow at the Center for Animal Health and Food Safety (CAHFS). CDC scientists are on the front line of public health, conducting epidemiologic investigations, research, and disease surveillance worldwide.

Due to the severity of both outbreaks, the team received additional assistance to continue to investigate the lymphocytic choriomeningitis outbreak in the United States, and then boarded a plane with an ABC news crew bound for Uganda. While the team was in Uganda, another Ebola outbreak was found nearby in the Democratic Republic of Congo.

“It was a very exciting time,” says Knust, who spent more than two months in Africa collecting data. “I got back in the United States just in time to begin working on a hanta virus outbreak in Yosemite National Park.” Two more filovirus outbreaks were then detected in Uganda, and the team went back out to respond again.

A couple of years after obtaining her DVM from Michigan State University, Knust pursued a master’s in public health (MPH) from the University of Minnesota while completing a residency in veterinary public health through CAHFS. The residency provided Knust hands-on learning experience that helped her transition from private veterinary practice, where she worked directly with livestock producers and pet owners, to becoming an Epidemic Intelligence Service officer at the CDC, studying the epidemiology of high-containment, deadly viruses.

“I was hired as a veterinary public health fellow at CAHFS for 30 hours a week, which allowed me to take MPH courses at the same time,” says Knust. “The residency helped me gain experience in various aspects of research and public health and taught me how to apply those experiences in the public health field.”

During her residency, Knust worked on a project with Dr. Scott Wells, director of academic programs at CAHFS.

“On my very first day, he called me into his office and asked me if I wanted to work on a project involving bovine tuberculosis,” Knust recalls. “It was very exciting. I wasn’t sure what I was getting into.”

Work on the project required her to travel to farms in northwestern Minnesota in the dead of winter with a U.S. Department of Agriculture biologist. The team completed environmental assessments of the farms, looking at how agricultural practices might lead to cross-species transmission of bovine tuberculosis.

“It was a great experience,” says Knust. “We obtained information that the state then used to reduce deer and cattle interaction. I got experience setting up the project, and it was gratifying that the Minnesota Board of Animal Health and Department of Natural Resources were able to use the information.”

Knust’s veterinary public health residency prepared her to think broadly across species and populations. Today, instead of helping individual animals like she did when she was in private practice, Knust works to protect humans and animals from viral diseases that have the potential to wipe out entire populations.
Notes from the college’s alumni relations officer

Warm greetings! Thank you for reading this issue of Profiles. We hope you enjoy learning more about the accomplished students at the College of Veterinary Medicine (CVM) and the wonderful research, faculty, and alumni at the CVM.

We want Profiles to reflect the interests, accomplishments, and activities of CVM alumni. Have you started a new position, been promoted, or received an award? Are you engaged in volunteer efforts or about to publish a book? Please let us know. We’d also love to hear your exciting family news, such as a marriage, birth, or adoption, for our alumni newsletter and Facebook page. It’s easy to stay connected. Just go to www.cvm.umn.edu/alumni/stayconnected, click on the appropriate link, and fill in the form, even if it is as simple as an address update.

Did you know we have a Facebook page and LinkedIn group dedicated to CVM alumni and friends? Please join us on the social media sites and feel free to post comments or “like” posts. Our social media pages are a great way to hear about the latest happenings with your fellow alumni and the CVM. We also recently published our first issue of Alumni Tails, an e-newsletter for alumni and friends. If you missed it, please e-mail cvmalum@umn.edu to be added to our distribution list.

We cannot wait to hear from you. Please don’t hesitate to let us know what you are up to, and we will share the news.

Facebook: www.facebook.com/CVMAlumniAndStudents
LinkedIn: z.umn.edu/CVMlinkedin
Stay Connected: www.cvm.umn.edu/alumni/stayconnected

Please keep in touch!

Jennifer Scholl
Alumni Relations Officer

Share your news

Send your Alumni Class Notes using the online form at www.cvm.umn.edu/alumni/update or e-mail Jennifer Scholl, alumni relations officer, at genz0005@umn.edu.

Or send your news by mail using the form below (attach additional pages if necessary) to:

Alumni Relations, College of Veterinary Medicine, 1365 Gortner Avenue, St. Paul, MN 55108.

NAME:

ADDRESS:

CITY: STATE: ZIP:

PHONE: E-MAIL:

GRADUATION YEAR:

EMPLOYER:

TITLE:

ALUMNI CLASS NOTES:


DEATH ANNOUNCEMENT (NAME AND CLASS YEAR, PLACE AND DATE OF DEATH):
A unique opportunity to increase the power of your gift.

The College of Veterinary Medicine is part of a new University-wide program to build our endowments for student support. The program is called Fast Start 4 Impact, and it’s only available for a limited time, with a special benefit to donors making gifts for new endowed funds.

Why Fast Start is financially smart
Typically, an endowment fund starts small and grows over four years. Fast Start changes that, awarding students right away, in an amount that is roughly equivalent to the payout of a fully established fund.

How Fast Start works
For each new endowment gift or four-year pledge of $50,000 or greater, Fast Start will pay four years of annual scholarship or fellowship awards to College of Veterinary Medicine students, while the earnings on the new endowment fund are re-invested for growth.

Gifts or pledges in these ranges

<table>
<thead>
<tr>
<th>Amount Range</th>
<th>Receive scholarships in these amounts*</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 50,000 – $ 99,999</td>
<td>$ 10,000</td>
</tr>
<tr>
<td>$ 100,000 – $ 149,999</td>
<td>$ 20,000</td>
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<tr>
<td>$ 150,000 – $ 199,999</td>
<td>$ 30,000</td>
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<tr>
<td>$ 200,000 – $ 249,999</td>
<td>$ 40,000</td>
</tr>
<tr>
<td>$ 250,000 +</td>
<td>$ 50,000</td>
</tr>
</tbody>
</table>

*Scholarship awards are paid out over four years in equal amounts.

Who Fast Start benefits
- Undergraduate students
- Graduate students
- Professional school students

Now is the time to consider making your Fast Start commitment to the College of Veterinary Medicine. You can find more information at giving.umn.edu.
ALUMNI CLASS NOTES

1960s
Dr. Daryl Buss, class of 1968, was presented with the Wisconsin Farm Bureau Federation’s Distinguished Service to Agriculture Award during the organization’s 93rd Annual Meeting on December 2. Buss served as dean of veterinary medicine at the University of Wisconsin-Madison from 1994 until he retired in June 2012.

1970s
Dr. Ken Norlund, class of 1977, has been named Dairy Industry Person of the Year by the World Dairy Expo. A clinical professor in the food animal production medicine group at the University of Wisconsin School of Veterinary Medicine, Norlund was a private practitioner and practice owner in Fergus Falls, Minnesota, from 1977 to 1989. He is a board-certified dairy specialist in the American Board of Veterinary Practitioners. Norlund will be honored at a special banquet during the World Dairy Expo in Madison, Wisconsin, in October.

Dr. Brad Thacker, who earned his DVM (1978), MS (1982), and PhD (1985) from the University of Minnesota, received the Technical Services/Allied Industry Veterinarian of the Year Award from the American Association of Swine Veterinarians at the association’s annual meeting in San Diego March 4.

1980s
The American Veterinary Medical Association’s Professional Liability Insurance Trust announced the appointment of Dr. Janet Dee Donlin, class of 1981, as its chief executive officer. Most recently, Donlin served as chief veterinary officer at Hill’s Pet Nutrition Inc., where she was responsible for managing the company’s global veterinary teams and driving the development of innovative products and services for the veterinary profession. She served in several executive roles at the AVMA from 1991-2007, including assistant and interim director of the Scientific Activities Division, associate executive vice president, interim CEO of the National Council on Veterinary Economic Issues, and assistant executive vice president. She began her career in a mixed animal practice, then held faculty positions at the University of Minnesota while also working at an emergency clinic. She visited the college on behalf of Hill’s last November, presenting a check for $500,000 to Drs. Jody Lulich and Carl Osborne for the Minnesota Urolith Center.

“Economic Analysis Favors Use of Reproductive Technologies,” by Dr. John Rodgers, Cattle and Equine Technical Services, Pfizer Animal Health, was published by Drovers CattleNetwork on January 4. John earned his DVM from the College of Veterinary Medicine in 1983. Research for his study was completed as part of his master’s degree from the University of Minnesota in 2008.

1990s
Dr. Barry Kerkaert, class of 1994, was named 2013 Swine Practitioner of the Year by the American Association of Swine Veterinarians (AASV) during the 44th AASV Annual Meeting in San Diego, California, in March. The award is given to a swine practitioner who has demonstrated an unusual degree of proficiency and effectiveness in the delivery of veterinary service to clients. A native of southwestern Minnesota, Kerkaert joined the Pipestone Veterinary Clinic after graduation. He has since become one of the managing partners in the veterinary practice.

Veterinary Practice News included two 1996 alumni on their “25 to Watch in Our 25th Year” list: Dr. Kate Knutson of Pet Crossing Animal Hospital and Dental Clinic in Bloomington, Minnesota, and Dr. Deborah Murray of New Fashion Pork in Jackson, Minnesota. Murray was named the 2012 Young Swine Veterinarian of the Year by the American Association of Swine Veterinarians.

Dr. Robin Radcliffe, class of 1991, now works with endangered species and is an adjunct professor at Cornell University College of Veterinary Medicine. He was recently in “The Loneliest Animals,” an episode of Nature aired on PBS.

Dr. Lisa Tokach, class of 1990, will receive the Science in Practice award at the Allen D. Leman Swine Conference at Saint Paul RiverCentre on September 16. After graduation, Tokach joined Steve Henry, DVM, in mixed animal practice at the Abilene Animal Hospital in Abilene, Kansas. Later, she worked on a team of veterinarians and producers that addressed swine disease while attempting to keep their clients’ operations profitable and the pigs well-fed.

2010s
Dr. Jessica Christensen, class of 2011, has purchased Mid-River Veterinary Clinic of Chamberlain, South Dakota, from Dr. Julie Williams, who had practiced in Chamberlain for 30 years. Jessica had served as associate veterinarian at Gregory Animal Clinic in Gregory, South Dakota, for the previous year and a half.
In memory

Dr. Douglas W. Carlson, class of 1968, passed away on April 22. In addition to being a veterinarian and beef farmer, Carlson was a Minnesota legislator in the 1970s and ’80s.

Dr. Elaine (Briggs) Ness, class of 1998, died suddenly on April 18. After starting out in large animal medicine in a mixed animal practice in south-central Wisconsin, she began practicing exclusively small animal medicine and surgery in 2005. Most recently, she was with Wildwood Animal Hospital and Clinic in Marshfield, Wisconsin.

Dr. Lester H. Swanson, class of 1958, died December 31 at age 91. After earning his DVM, he settled with his wife, Marion, in St. Croix Falls, Wisconsin, where he raised his family and practiced veterinary medicine until he retired in 1986.

Alumni well-represented on MVMA board

College of Veterinary Medicine alumni are well-represented on this year’s Minnesota Veterinary Medical Association (MVMA) board. Dr. John Baillie, class of 1972, is president; Dr. Alan Sletten, class of 1988, is president-elect; Dr. Nicole Neeser, class of 1999, is vice president; Dr. Jim Winsor, class of 1985, is secretary-treasurer; and Dr. Eric Ruhland, class of 2008, is a director.
Alumni & Friends Society Board

Dr. Jack Risdahl, DVM 1988, PhD 1993
  Board President and Governance Committee

Dr. Trevor Ames, MS 1981
  Dean

Dr. Mary Jo Baarsch, PhD, 1994

Dr. Kevin Barcus, DVM 1986
  Mentor Committee

Dr. Jennifer Gallus, DVM 2012

Dr. Rick Goullaud, DVM 1983

Dr. Rodney Johnson, DVM 1970

Dr. Judith Lapham, DVM 1988

Dr. Roy Martin, DVM 1989
  University of Minnesota Alumni Association Board Representative

Dr. Anna Michael, DVM 2011

Dr. Larry Morrisette Jr., DVM 1989

Dr. Barbara O’Leary, DVM 1976
  Governance Committee

Dr. Kelly Ryan, DVM 1988

Dr. Tom Schuld, DVM 2003

Dr. Dale Sorensen
  Former Dean

Dr. Jerry Torrison, DVM 1986, MS 1992, PhD 1998
  Mentor Committee and Governance Committee

Rhonda Burge, class of 2016
  Student Representative

Melanie Jackson, class of 2015
  Student Representative

Get social

Visit the College of Veterinary Medicine’s alumni Facebook page at www.facebook.com/CVMAlumniAndStudents

Connect with students and fellow alumni on LinkedIn at http://z.umn.edu/CVMlinkedin

I'm a member.
I'm an ambassador.

When you’re a member of the University of Minnesota Alumni Association, you’re an ambassador for the important work happening at the University. I’m an ambassador because the College of Veterinary Medicine (CVM) graduates professionals who provide state-of-the-art veterinary services.

Support the U and the College of Veterinary Medicine Alumni Society by becoming a member. Your active membership entitles you to exclusive access to dozens of benefits including discounts on cultural activities, gopher apparel, online access to two U of M Libraries databases, and numerous campus activities, including The Raptor Center. And 20% of every new alumni membership comes directly back to CVM, supporting alumni centered events and funding scholarships.

Visit www.MinnesotaAlumni.org/VetMed or call 612-624-9658 to become a member. Use campaign code NP4VM when you join to ensure the CVM benefits from your membership.

UNIVERSITY OF MINNESOTA ALUMNI ASSOCIATION
Where members are ambassadors

Dr. Roy Martin, B.S. ’87, D.V.M. ’89
  College of Veterinary Medicine Alumni Association National Board
Profiles
College of Veterinary Medicine
University of Minnesota
1365 Gortner Avenue
St. Paul, Minnesota 55108
Change service requested

Upcoming Events

Allen D. Leman Swine Conference
September 14-17, 2013
Saint Paul RiverCentre

University of Minnesota Homecoming 2013
September 22-28, 2013

Fall Raptor Release
September 28, 2013, 10 a.m.-2 p.m.
Carpenter Nature Center, Hastings, Minnesota

Points of Pride Research Day
October 2, 2013
Pomeroy Student-Alumni Learning Center

Care and Management of Captive Raptors
October 8-11, 2013
The Raptor Center

Duke Lecture: “Feathers: The Evolution of a Natural Miracle,” presented by Thor Hansen
October 10, 2013

Leman China Swine Conference
October 13-15, 2013
Xi’an, China

An Ethical Dialogue:
Advancing Canine Health and Welfare
October 15, 2013, 3:00-6:30 p.m.
University of Minnesota St. Paul Campus
For more information, e-mail heathers@americanhumane.org.

International Conference on One Medicine
One Science (iCOMOS)
April 27-30, 2014
The Commons Hotel, Minneapolis

For up-to-date news and information about the College of Veterinary Medicine, visit our website at www.cvm.umn.edu.

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