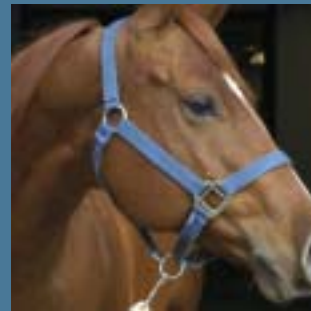


# Profiles

Winter 2003

## Veterinary Medicine



**Veterinarians Impact the  
Lives of Minnesotans Every Day**

### In this Issue

- Summer Science
- Building a Better Veterinarian
- Externships: Students Put Learning to Work
- Faculty Q&A: New Equine Undergrad Program
- Dentistry Service
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# Profiles

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## From the Dean

### Learning In Many Ways

Of the many things we teach our students, one of the most important lessons may be that learning occurs in many ways and in many settings; both in and out of the classroom.

Although there are many and varied learning opportunities at the college, Minnesota is becoming recognized as a leader in providing significant practical, experiential opportunities for veterinary students. Experiences outside of the college provide students the opportunity to see the “real world” of veterinary medicine, help students gain an understanding of the many facets of the veterinary profession and enhance mentorship opportunities.

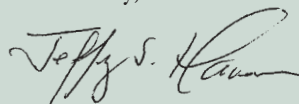
Freshman and sophomore students practice clinical skills by spending afternoons in private veterinary practices. Private practitioners allow students to take histories, perform physical examinations and practice routine clinical skills such as phlebotomy. Early clinical exposure is important in helping students understand the relevance of the basic science that they are learning. In addition, these early practice visits provide mentorship opportunities and, in some instances, have resulted in permanent jobs following graduation.

For students pursuing a career in dairy medicine, the Transition Management Facility (TMF) in Baldwin, WI provides another wonderful experiential opportunity. During their two-week rotations at the TMF, senior students participate in all aspects of medical evaluation and therapy of pre- and post-partum dairy cows. More than 50 calves are born each week at the facility. In addition, students are exposed to management and financial aspects of managing a large dairy operation. A swine farm near Morris, MN provides a similar experiential opportunity for students interested in swine medicine.

Students interested in public health can elect rotations at the MN Department of Health and USDA, and students interested in a career in industry can elect rotations at one of Minnesota's many biotechnology companies such as 3M and Medtronic.

All of these experiences add breadth and depth to the knowledge that students gain in the classroom. In this issue of *Profiles*, you will get a glimpse of the many different ways in which learning occurs.

Sincerely,

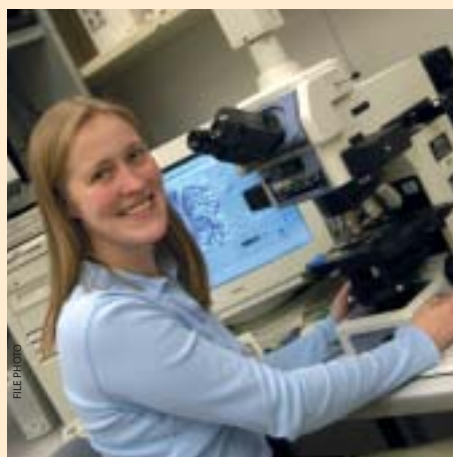


Jeffrey S. Klausner, DVM, MS, DACVIM  
Dean, College of Veterinary Medicine



# Summer Science

**K**ari Ekenstedt will always remember three things about the summer of 2003: wakeboarding in Wisconsin, mountain biking in Colorado, and studying rats' knees under a microscope.



Kari Ekenstedt examines slides of rat knees for signs of osteoarthritis.

Now in her third year of the D.V.M./Ph.D. program, Ekenstedt was one of 11 veterinary students who conducted research and attended weekly research seminars as part of this year's Summer Scholar program. Funded by the college, Merck-Merial, and the University of Minnesota Center for Animal Health and Food Safety, the program gives students a chance to explore research as a potential career option.

Ekenstedt focused on the incidence of osteoarthritis in genetically dwarf rats treated with growth hormone for 18 months. Ekenstedt not only contributed valuable knowledge about potential strategies for preventing joint disease in animals and humans, she also learned skills that she expects to use in a research career.

Second-year student **Daniel Kovich** spent his 10-week Summer Scholar experience evaluating the susceptibility of adult cattle to Johne's disease, a persistent, profit-robbing bacterial infection found in nearly one-quarter of U.S. dairy herds. By comparing the incidence of Johne's in animals raised on farms where Johne's was endemic with that for animals first exposed as adults, Kovich hopes to help demonstrate the value of an initiative that certifies herds as being Johne's-free.

A student in the D.V.M./M.P.H. dual-degree program, Kovich doesn't currently plan on a research-intensive career. Nevertheless, he sees the experience as a valuable tool for better understanding and interpreting studies in the future. "I'm definitely glad I did it," he says. "You gain a whole new set of skills than you would in a traditional vet med classroom." ✚



Many studies will use the Clinical Investigation Center's experimental surgery suite.

## A chance to participate

The Clinical Investigation Center (CIC) in the college provides students with the opportunities to participate in research projects. Three students are involved in a CIC study led by new faculty member, Elizabeth Pluhar, who's looking at the use of noninvasive imaging to assess success of bone graft surgery in sheep. The students help with surgery, perform daily examinations, and assist in analyzing and reporting results.

"The partnership clearly benefits both the investigator and the students," says CIC research coordinator, Kathleen Stuebner. "Dr. Pluhar was able to employ knowledgeable, motivated assistants, while the students gained invaluable experience." ✚

## Training Grant Jump-Starts Neuro Science Research Careers

A five-year, \$5 million National Institutes of Health training grant is helping the University of Minnesota encourage careers in neuroscience research.

The multidisciplinary program, headquartered in the College of Veterinary Medicine, provides tuition, a stipend, and travel funds for 21 Ph.D. and post-doctoral students from across the

University. Students receiving support from the grants are affiliated with a variety of research groups in the Academic Health Center, College of Liberal Arts, and external institutions such as the Veterans Administration Medical Center and Hennepin County Medical Center.

According to principal investigator, Tom Molitor, professor in the Department of

Clinical and Population Sciences, the grant is helping increase the numbers of researchers able to address emerging issues related to neurobiology and addiction. "These training grants provide an important component to our mission," said Molitor. "We're a much better institution because of them." ✚

# Building A Better Veterinarian

**W**hich combination of characteristics makes the best veterinarian: Brains, brains, brains, and brains? Or brains, empathy, autonomy, and integrity?

Concerned they were placing too much attention on academic achievement and too little attention on other traits in selecting students, a consortium of veterinary schools asked Personnel Decisions International (PDI) to help develop a more balanced evaluation approach. By interviewing successful veterinarians, PDI identified 13 key nontechnical competencies likely to lead to success. The study concluded that the students who make the best veterinarians cannot be found simply

by looking at academic records. Rather, veterinary schools should assess a variety of traits such as communication skills, confidence, integrity, and resilience in order to choose those most likely to succeed in a veterinary career.

In addition to identifying key competencies, PDI also developed a structured behavioral interview guide that veterinary schools may use to identify nontechnical competencies in applicants. This year, the college will become the first veterinary school to put PDI's recommendations into action when it incorporates the structured interview into the process of selecting members of the next D.V.M. class.

"We have long suspected that academic measures alone were not the best way to determine who would be a successful veterinarian," says Laura Molgaard, associate dean of academic and student affairs. "We're still going to be considering academic measures, but we're also going to be looking at other attributes."

Information on the report can be found in the August 15, 2003 issue of JAVMA or online at [www.avma.org/onlnews/javma/aug03/030815g.asp](http://www.avma.org/onlnews/javma/aug03/030815g.asp) ☞



## Virtual Physical Examination

Today's veterinary students may have more to learn than ever, but they also have more ways than ever to learn it. One valuable tool is a CD-ROM that leads students step-by-step through a canine physical examination.

Developed by faculty members Laura Molgaard and Abby Sage, the CD has several advantages over a real-time demonstration. It gives students a chance to experience a wide range of conditions. For example, a student observing the "heart" portion of the exam has the opportunity to listen to

both normal and abnormal cardiac rhythms. The CD also makes it possible to reinforce learning by repeatedly viewing part or all of the examination.

The CD is mainly used by first-year students. However, other students and even practicing veterinarians have used it to brush up on their skills. "One needs to constantly practice their skills," Molgaard says.

The CD is available through the college bookstore. Call 612-624-1702 for information. ☞

## LEARNING THROUGH EXPERIENCE

# All the World's A Stage

**W**hat's the best way to divide your attention between a horse and its owner during a physical exam? How do you tell a client his dog is dying? D.V.M. students can now practice the "people" part of clinical work in a simulated environment through the Academic Health Center's new **Interprofessional Education and Resource Center (IERC)**.

At the IERC, trained actors portray clients in exam-room scenarios that give students a chance to polish nontechnical clinical skills such as eye contact, empathy, and active listening. The actors provide feedback, and students can critique themselves and their peers by reviewing videotapes of their "performance."

"The students loved it," said Laura Molgaard, associate dean of academic and student affairs, after students' first IERC experience last spring. "They were terrified going in, but when they came out they were saying, 'We should do this every day.'"

The IERC opportunity is part of a larger effort begun six years ago to help students gain hands-on skills early in their education. In 1997 the college began offering students a three-year clinical skills course. The series of classes cover everything from restraining animals and clipping toenails to history-taking and communicating with clients. Central to the program is a variety of opportunities to observe and participate in the day-to-day activities of established veterinary clinics.

"Hand-on training is what students want, and it's really what they need," Molgaard says. 📍



## Vet FAST

**Undergraduates aiming for a career in large animal veterinary medicine can now get on track more quickly than ever with the college's new VetFAST program. Begun this year in response to a nationwide shortage in food-animal veterinarians, the program lets students apply to veterinary school as early as their freshman year in the College of Agricultural, Food and Environmental Sciences, and complete both their B.S. and D.V.M. degrees in seven years. It also opens the doors earlier for mentoring, scholarships, and various internship and work opportunities.**

**For more information about VetFAST call 612-624-4747. 📍**

## Class Size Up

**The college welcomed 94 first-year students this fall, 14 over recent years' enrollment. The increase is expected to help meet a growing need for veterinarians trained to deal with issues such as food safety, biosecurity, and zoonoses (diseases that affect both animals and humans). It will also help increase the number of students interested in food-animal practice.**

**"The demand for veterinarians trained in food animal and public health is quickly outpacing the available supply, particularly in light of economic and political changes over the past few years," said dean Jeff Klausner. "We're committed to educating more veterinary students with the qualifications to provide such services." 📍**



*All 94 freshmen students attend Drs. Cox and Fletcher's anatomy lab.*



Amanda Sundvahl receives valuable surgery experience during her externship on a Native American reservation.

# Externships: Students Put Learning to Work

**T**ake your pick: You may spend part of your summer in Alaska on the beautiful Kenai Peninsula. Or go to Hawaii or Puerto Rico. Or travel to South Africa or New Zealand. If you think these are great travel opportunities, you'd be only partly right. For seniors at the college, they're possible externship locations, places to work with other veterinary professionals in a veterinary practice. Students are required to do three to five two-week externships to graduate, and many students find these work-study periods one of the more enlightening aspects of their veterinary education.

"Students here really want to get the most out of their education," says Laura

Molgaard, associate dean of student and academic affairs. "The purpose of externships is to get students out into the larger community, working with people in private practice or industry. Externships are an opportunity to practice the skills they've learned, to see and do what they will be doing after they graduate."

To choose their externships, students use a new college database called Vcross, which contains a host of opportunities including working with large animals, small animals, or exotic animals in settings ranging from animal hospitals to zoos to corporations all over the world. Many of the veterinarians offering the externships are graduates of the college who now want to give back to their alma mater.

## WENDY GRUBER

Kenai Veterinary Hospital, Kenai, Alaska

I grew up in Soldotna, Alaska, and I have known the veterinary hospital's owner since I was a little girl. Two doctors, one technician, and a receptionist make up the staff at the hospital. I observed surgery and other procedures (porcupine quill removal, abscess lancing, etc.) and participated in most daily appointments. I also did surgeries (spays, neuters, and declaws) on a daily basis.

Not only did I learn during this experience, but I was able to teach as well. The doctor was eager for me to bring new ideas and methods into the practice. The amount of experience and confidence I gained will be invaluable to me in my future, especially when choosing a job. The staff was truly a team that enjoyed working with their patients and each other. This is the type of environment that I will be looking for when choosing a job.

## ERIKA OLSON

South Africa

I participated in a two-week wildlife medicine course in South Africa. As part of the course, I was involved with the capture and relocation of rhinos and sable antelopes and tuberculosis testing of cape buffalo and a lioness and her cubs. We also had an opportunity to visit a wildlife rehabilitation center, a cheetah breed-

ing facility, and a crocodile-breeding farm. The externship was perfect because I am very interested in wildlife medicine as a career and wanted to learn what it's like to work with wildlife in their natural environment. It was also a great chance to meet other vet students from the United States and other countries.

## GREG D. PHILLIPS

Hudson Road Animal Hospital, Woodbury, MN

This externship gave me a good idea of what it will be like to work as a veterinarian in a community practice. I took patient histories, performed physical exams, gave vaccines, developed diagnostic plans, evaluated tests, and devised treatment plans (all with superb supervision). I was also trained in how to use the hospital's laser for spays, neuters, lump removals, and declaw operations. I removed several lumps, performed dental prophylaxis, and managed a bandaging regimen for an injured dog. I also had an opportunity to observe a wonderfully efficient and smooth-running practice. All in all, this externship was a phenomenal experience! It helped me gain confidence in my abilities and see what can be accomplished in practices that are designed and managed well.

In March 2004, I will be traveling to Anchorage, Alaska, to take part in an externship associated with the Iditarod Sled Dog Race. I have seven sled dogs of my own, and someday I would like

to be able to spend part of each winter acting as a veterinarian for sled dog races.

## AMANDA SUNDVAHL

The Humane Society of the United States Rural Area Veterinary Services (RAVS)

Part of the Humane Society of the United States, RAVS brings free veterinary services to poor communities in the United States and abroad. I was part of a group that worked on Native American reservations in Minnesota and North Dakota. Each day, teams of three were assigned different duties, either receiving, examining, or discharging patients, performing surgery, or recovering animals after surgery. Most of the 10 days I was on this externship were spent spaying and neutering 10 to 15 animals a day per team. We also routinely dewormed and vaccinated animals.

This externship made me much more comfortable with a scalpel in my hand! It also helped me feel more at ease performing routine surgeries, handling tissues, monitoring an anesthetized patient, communicating with clients, working as a team, and teaching others. And it was a great experience meeting and working with vet students from other veterinary colleges.

# Not Your Father's Veterinary School

Twenty or thirty years ago, veterinary students tended to be pretty much alike—young men planning to work with either farm animals or dogs and cats.

Today's veterinary students come from all over the country, and some are entering the field as a second career.

The only real generalization that can be made about the college's 329 students is that each one is unique. In this article, you'll meet four of them.



## DAVE ANTENUCCI

Age: 43  
Hometown: Hollidaysburg, Pennsylvania

### **Why did you choose the University of Minnesota College of Veterinary Medicine?**

I like the dynamics an urban setting has to offer. I prefer a colder climate. Plus, I honestly thought I'd break Larry Bjorklund's heart if I didn't apply — that's how comfortable he made me feel during my visit.

### **What are your special interests?**

Small animal medicine — especially complementary medicine and nutrition — and wildlife rehabilitation. I honestly cannot wait to start educating my clients as to how they can take better care of their animals.

### **What do you hope to accomplish in your career? Where would you most like to make an impact?**

I'll feel like I've accomplished something when I do not have to advertise my services — when my weekly schedule is full of clients and their animals attracted purely via word-of-mouth. As for where I'd like to make an impact, there's one side of me that would like to impact my community on a very personal and individual level — and then there's my desire to connect my mechanical engineering skills with my medical interests, maybe inventing some incredible new device

### **What is your dream job?**

A multi-doctor practice in a vibrant, urban setting that practices terrific medicine and has a good time doing it.



## AMANDA MURDOCK

Age: 29  
Hometown: Austin, Texas

### **Why did you choose the University of Minnesota College of Veterinary Medicine?**

The reputation of the Twin Cities was a big consideration. The curriculum of the college, including hands-on experience in the first year, ample surgery opportunities, and high caseloads, was the deciding factor.

### **What are your special interests?**

Wildlife, including diseases, epidemiology, surgery, and management.

### **What do you hope to accomplish in your career? Where would you most like to make an impact?**

I would like to have an active part in controlling the spread of wildlife diseases, especially zoonotic diseases, and also help the individual through treatment and surgery.

### **What is your dream job?**

To repair fractures on raptors and wild carnivores — and to be able to make a living doing it.



## NOAH BARKA

Age: 24  
Hometown: Litchfield, Minnesota

### **Why did you choose the University of Minnesota College of Veterinary Medicine?**

Because it would afford me access and training within the large biomedical research community of the University and Twin Cities area, in addition to its strong basic science and clinical training programs.

### **What are your special interests?**

Comparative biology. I am particularly interested in research and development of medical devices (i.e., heart valves and pacemakers) and the care of laboratory animals.

### **What do you hope to accomplish in your career? Where would you most like to make an impact?**

I hope to help develop therapies that improve the lives of people and animals. In this process, I hope to significantly refine the models of experimentation that are necessary for developing products and improve on existing techniques and methods.

### **What is your dream job?**

Working as part of a team in a research laboratory developing therapies and devices to cure disease. From the initial stages of developing innovative solutions to problems through planning and conducting the research, I hope to be involved in projects that challenge my knowledge and skills every day.



## CHIHIRO GARDINER

Age: 29  
Hometown: Tokyo, Japan

### **Why did you choose the University of Minnesota College of Veterinary Medicine?**

The reputation of the University of Minnesota is wonderful. When I was a junior, I attended the open house at the college. Everyone was so nice, and I liked the atmosphere of the college as well as the attitude of the students.

### **What are your special interests?**

Small animal medicine and surgery

### **What do you hope to accomplish in your career? Where would you most like to make an impact?**

For now, I'm just hoping to find an area to specialize in. I am having a hard time deciding what area I'd like to specialize in, since everything is so interesting.

### **What is your dream job?**

I am crazy about dachshunds. I would love to be a veterinarian for all the world's dachshunds!

# Faculty Q&A



## Christie Malazdrewich, Assistant Clinical Specialist, Department of Clinical and Population Sciences

Christie Malazdrewich is coordinator of the new equine undergraduate program, a joint initiative of the College of Veterinary Medicine and the College of Agriculture, Food and Environmental Sciences (COAFES).

**Q:** *What new opportunities will the equine undergraduate program offer?*

**A:** The program, scheduled to begin in fall 2004, will allow students to earn a degree in animal science with an equine emphasis. Students will have the opportunity to take classes taught by both Department of Animal Science and College of Veterinary Medicine faculty.

**Q:** *Why here? Why now?*

**A:** Nationwide we are seeing a change in focus from food animals to companion animals, including horses. In Minnesota, in particular, horses are a very important part of our economy and recreational environment. There is a large population of horses statewide, and the Twin Cities area has been rated one of the top 10 places in the country to own a horse. So there is a big demand here for people trained to work in the equine sector.

**Q:** *What topics will be covered?*

**A:** Students in the new equine undergraduate program will take the spectrum of classes that have long been a part of an animal science degree—nutrition, breeding, physiology, basic sciences, and so on. In addition, they will take several specialized classes, such as equine nutrition, equine anatomy and physiology, and equine reproduction.

**Q:** *What kinds of careers might this program lead to?*

**A:** This is an ideal course of study for individuals interested in working for an equine-related company or

running a boarding stable or breeding facility. Many students enrolled in the equine undergraduate program will likely go on to a career in veterinary medicine. Others may seek an advanced degree in animal science.

**Q:** *How will the program relate to the proposed University of Minnesota Equine Center?*

**A:** The University of Minnesota Equine Center, now in the fundraising stage, will build on our strong equine faculty to provide a world-class concentration of equine veterinary services, education, and research. The new program will be part of a spectrum of learning opportunities ranging from undergraduate and veterinary courses to continuing education offerings for equine professionals.

How may I learn more? Contact 612-625-7755 for more information.



Christie Malazdrewich,  
Assistant Clinical Specialist



# Student Involvement Key to Puppy Socialization Classes

Since 2002, students have played an integral role in teaching a very popular and important course offered by the Veterinary Medical Center: **Puppy Class**.

With activities like “pass-the-puppy” and “puppy playtime,” Puppy Classes look like so much fun that it’s easy to overlook the animal behavior principles and training that underlie the exercises. The students involved in teaching the classes are members of the award-

winning University of Minnesota Student Chapter of the American Veterinary Society of Animal Behavior. Each has completed a 14-hour training program, observed a class, and worked with puppies under the supervision of Pam Hand, D.V.M., who with animal behaviorist, Petra Mertens, Dr. med. vet., DACVB, developed the Puppy Class curriculum.

“Our hope is that students who graduate from the college will be advocates of puppy socialization classes within the veterinary profession,” Hand says. “These classes benefit the puppies, the owners, the public as a whole, and the veterinarians who handle these puppies throughout their life. Veterinary students learn best about these classes and their benefits by actually teaching in the classes themselves.”

Donnell Hofeld, a college junior, began teaching Puppy Classes after participating with 23 other students



*Donnell Hofeld, a college junior, offers a reward to Clyde, a West Highland White terrier puppy belonging to the Cranes of St. Paul, Minnesota. Clyde graduated from Puppy Class in October*

in the first student training session in 2001. “For dogs, puppyhood is either a stepping stone or a stumbling block,” she says. “Puppy classes are one of the most valuable experiences people can offer their dogs. They learn about fun, safe, and effective training methods and get a dog that is well-mannered and socialized.”

Puppy class has also been a valuable learning opportunity for her as a student. “I’ve gained experience interacting with—and hopefully improving—both the animal and human aspect of veterinary medicine,” she says. “Implementing a puppy course in whatever area of veterinary medicine is a priority of mine.”

For more information on puppy classes, call 612-624-0797 ☎

## Satisfied Client Volunteers Time at the Veterinary Medical Center

**Tucker LeBien, a professor at the Cancer Center at the University of Minnesota Medical School and college donor, became one of several new volunteers at the Veterinary Medical Center in August. He functions as an “animal concierge,” greeting incoming clients, escorting clients around the Medical Center, answering questions, and otherwise serving as a supportive advocate for the college.**

**“I have some good friends at the vet school,” he says. “It’s a remarkable organization and represents the university in a very positive light.”**

**But what truly inspired LeBien to volunteer his time at the hospital was the**

**many years of excellent care received by his 17-year-old West Highland White terrier, Sparkle.**

**“Sparkle’s been at the Veterinary Medical Center for everything from dental work to orthopedic surgery, and the care has been excellent,” he says. For more information on the volunteer program, contact Audrey Boyle at 612-625-3770. ☎**



*Tucker LeBien, a professor in the Cancer Center at the U of M Medical School, gives Sparkle, his 17-year-old West Highland White terrier, a hug.*

## Dental Service Has Gone to the Dogs (and Cats)

Gary Goldstein, associate clinical specialist in the Small Animal Clinical Sciences Department, joined the college a little over a year ago, to lead the **Dentistry Service** in the Veterinary Medical Center. The service, one of only four full-time clinics in the nation, has increased its volume of cases by 30% during that time seeing 1,200 to 1,500 cases a year and generating \$500,000 in revenues.

In addition, Goldstein's passion for sharing knowledge has spilled over into the veterinary community. One of only two board-certified dentistry veterinarians in Minnesota, Goldstein hosts monthly dental rounds for 25 other veterinarians interested in broadening their knowledge of dentistry procedures. He also conducts daylong dental workshops



*The college is one of four veterinary schools in the nation with a full-time dedicated dental practice headed by Dr. Gary Goldstein.*

for practitioners interested in general and advanced dental techniques.

"Dental care for animals is similar to dental care for humans, only animals can't brush their own teeth," Goldstein says.

Since the animals won't lie still for dental work, they need to be anesthetized before any dental procedure to ensure their safety, as well as that of the dental staff. In spring 2004 a veterinary student from Texas A&M will travel to the University to experience this specialized offering not found at many schools.

The dental specialty serves our animals, and through education, advances animal and human care by enhancing the skills of the students, staff, and veterinarians.

For a dental appointment, call 612-625-1919 ☞

## Veterinary Medical Center's Animal Behavior Service Helps Animals and People

The **Animal Behavior Service** at the Medical Center led by Petra Mertens, D.V.M. and Margaret M. Duxbury, D.V.M., treat a wide range of behavioral problems in dogs, cats, and other companion animals such as birds and horses.

Generally, people seek help for their dogs as a result of aggressive, fearful, destructive, and unruly behaviors. Among cats, failure to use a litter box and aggression are the most frequent problems. After a diagnosis is made, treatment options—usually behavior modification techniques—are described and demonstrated. In some cases, medication is prescribed as an adjunct to behavior modification.

"Today's training techniques are reward-based. They include various levels of rewards, with treats being the ultimate reward for good behavior. Punishment is avoided because it does not change the animal's underlying reasons for acting in an

undesired fashion and may lead to increased anxiety in the animal," Mertens says.

"Many of these animals are struggling to get along and cope within the constraints of human society," adds Duxbury. "It is extremely rewarding when we can help them function better. Their quality of life improves, and so does that of their owners."

In addition to seeing patients at the Medical Center, Mertens shares information about animal behavior as a guest on Minnesota Public Radio's "Midmorning" with Katherine Lanpher. Live on the air, she answers listeners' questions about everything from canine noise phobias to feline aggression.

"It's a good way to increase awareness of treatment options for behavior problems and reminds people about the innovative service at the University," she says.

### Did you know?

- ☞ **Behavior problems are the number-one reason for surrender and euthanasia of pets.**
- ☞ **Rewarding the behavior you want—rather than punishing undesired behavior—is the most effective way to modify behavior in dogs, cats, and other animals.**
- ☞ **To dogs, direct eye contact is perceived a threat. So are hugging, kissing, and other human expressions of affection. For a dog, close facial proximity may be a prelude to a bite!**
- ☞ **Tail-wagging isn't always a sign of friendliness in a dog. If accompanied by a stiff body posture and direct eye contact or growling, it could mean trouble.**
- ☞ **Puppy socialization classes are more than a good time. They're a key to avoiding behavior problems later in life. And to get the most benefit, it's important to start classes when the puppy is very young — between 7 and 14 weeks of age.**



## Faculty awarded National Institutes of Health Training Grant

The University of Minnesota College of Veterinary Medicine has been awarded a \$1 million, five-year training grant in Comparative Medicine and Pathology from the National Institutes of Health. The grant will allow faculty to provide research opportunities for veterinarians enrolled in its Molecular Veterinary Biosciences Graduate Program.

“The mission of this multidisciplinary program is to train outstanding students in basic and comparative research in the mechanisms of animal and human health and disease,” said Cathy Carlson, D.V.M.,

Ph.D., the principal investigator on the project and an associate professor of veterinary diagnostic medicine. The grant will allow 16 faculty members to provide state-of-the-art research experiences for up to five graduate veterinarians at any one time.

“This program offers a unique opportunity to provide research training in fields such as comparative medicine and pathology, genomics, and infectious disease for the next generation of veterinarians to address and protect animal and public health,” said Dean Jeffrey Klausner.

## Student Profile : Molecular Veterinary Biosciences Graduate Program

Laurie Brewer entered the combined D.V.M./Ph.D. program in fall 1998, and after completing the first two years of the veterinary medicine curriculum, began research in the virology laboratory of Dr. Moses Njenga in the Molecular Veterinary Biosciences graduate program. She is in the fourth year of her research project titled “Risk of Porcine Picornavirus in Xenotransplantation.” Encephalomyocarditis virus, or EMCV, is a common pig virus that infects herds worldwide resulting in acute heart failure as well as reproductive failures. Because transplantation of pig tissues and cells into humans has been identified as a future possible alternative to the shortage of human tissues and cells, it will be critical to prevent the transmission of pig viruses to human recipients.

Laurie found that pigs can remain chronically infected, and can also harbor EMCV despite negative commercial test results. Part of her research involved the development and characterization of a model of EMCV xenozoonosis resulting from the transplantation of pig islet cells into diabetic mice. This model served as the basis for development of preventive and therapeutic treatments of viral xenozoonotic infections in the lab. Her findings have been published in the *Journal of Virology and Xenotransplantation*. She will return to veterinary school next fall to complete the final two years of the DVM curriculum would like to work in wildlife and zoo animal medicine.

## Student Profile: Veterinary Medicine Graduate Program

A native of Argentina, Dr. Miguel Saggese is a master's degree student in the Veterinary Medicine Graduate Program, Infectious Diseases track. He is also a third-year resident at The Raptor Center, where he deals almost daily with injured bald eagles, owls and hawks admitted for treatment and rehabilitation.

Miguel's graduate advisor is Dr. Patrick Redig, director of The Raptor Center. Miguel expects to complete his degree by June 2004. The title of his thesis is “Antibody response and maternal antibody transmission in birds following inoculation with a West Nile virus DNA vaccine.” Working with clinic staff members at The Raptor Center, Miguel admitted a large number of West Nile virus cases during the summer of 2002. Seeing the effect of this new viral infection in the wild Minnesota bird population helped Miguel decide both his thesis research and his main interests for his professional life.

After completing his master's degree, Miguel is looking forward to Ph.D. study with a focus on infectious diseases and epidemiology. “The study and understanding of wildlife-livestock-human disease interactions is the first step towards devising effective preventive measures against disease transmission,” he says.

Miguel has published several articles in Argentinean journals and has made numerous presentations at congresses and symposiums over the past eight years. In 2002, he took part in the Neotropical Raptor Conference in Panama by presenting his work on “Monitoring Health Status of Free Ranging Raptors in Argentina,” thanks in part to grants received from the Graduate School and the Peregrine Fund. Currently, Miguel is working on several papers, including one on the clinical signs of WNV in raptors.



# College News

# NEWS NEWS

## Raptor Center Launches Study of Avian West Nile Vaccine



*As certified veterinary technician Greg Hanson held the bird, Pat Redig, director of The Raptor Center, gave the first injection of a new avian West Nile virus vaccine to a red-tailed hawk on Aug. 6.*

News crews from KSTP-TV and KMSP-TV were there to cover the event when Pat Redig, director of The Raptor Center, gave the first injection of a new avian-specific West Nile virus vaccine to a red-tailed hawk on August 6th, officially launching a long-awaited study of the efficacy of the vaccine. If the vaccine proves to be effective, it will be used on captive populations of birds at zoos, nature centers, and breeding facilities.

## National Geographic Television Visits College

A crew from National Geographic Television visited the college in September to tape part of a program about West Nile virus and other diseases that can be passed from animals to humans. The visit included The Raptor Center, where they observed the examination and treatment of raptors suffering from West Nile virus and learned about the center's research on an avian vaccine for the disease. They also visited the Veterinary Diagnostic Lab and followed veterinary students Luther Groth and Stacy Tinkler as they trapped mosquitoes and drew blood from infected horses. The program, "Ultimate Explorer," aired on MSNBC on November 30.



*A crew from National Geographic Television videotaped Julia Ponder, staff veterinarian at The Raptor Center, as she examined a hawk thought to be suffering from West Nile virus.*

## AVMA Continues Full Accreditation of CVM

The Council of Education of the American Veterinary Medical Association (AVMA) voted to continue full accreditation of the College of Veterinary Medicine in October. In addition to commenting that the college had "conscientiously and admirably addressed all of the recommendations" contained in its previous report, the Council of Education noted that the college's programs had benefited from "vigorous administrative leadership" during the past three years.

## Klausner Elected to AVMA Council on Research

Dean Jeffrey S. Klausner has been elected to a six-year term on the American Veterinary Medical Association (AVMA) Council on Research. The Council evaluates research award nominees, reviews grant applications, and promotes scientific investigation in all areas of veterinary medicine.

The AVMA advances the science and art of veterinary medicine, including its relationship to public health, biological science, and agriculture. The Council plays an active role in communicating with the veterinary profession, the biomedical research community, public agencies, and general public to promote research.



## Kudos

**Michelle Rider**, Class of 2005, was selected as the recipient of the Western States Conference Scholarship. Michelle has been an active student representative with the Morris Animal Foundation and Purina and will represent the college at their meeting in February 2004.

**Patricia Dranchak** and **Nilanjana Banerji**, graduate students, have been accepted into the Morris Animal Foundation's Fellowship program. The fellowship program recognizes ongoing efforts of scientists studying veterinary medicine and the long-lasting contributions they make to benefit animal health. Faculty member Jim Mickelson nominated Dranchak and faculty member Sagarika Kanjilal nominated Banerji.

**Jagdev Sharma**, professor, was selected by the American Association of Avian Pathologists to be the editor of *Avian Diseases*, a premier journal in avian medicine with a worldwide readership. The editorial office will move from the University of Connecticut to the University of Minnesota.



*Jagdev Sharma*

**Claudia Munoz-Zanzi**, a new faculty member in the Veterinary Diagnostic Department, was awarded first place by the American Association of Veterinary Laboratory Diagnosticians at their annual meeting for the best manuscript published in the *Journal of Veterinary Diagnostic Investigation* (Adaska, J., C. Munoz-Zanzi, S. Hetala 2002. Evaluation of result variability using a commercial John's disease ELISA kit and repeat testing of samples. *J. Vet Diagn Invest.* 14:423-426). She provided the key epidemiological model for the paper.

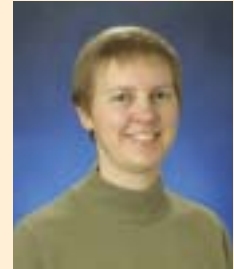


*Livija Carlson, librarian, retired on October 15 after serving the college for over 40 years.*

## Meet our Newest Faculty Members...



**Sophie Gilbert**  
*Assistant Clinical Specialist  
Small Animal Clinical Sciences*



**Eliabeth LaFond**  
*Assistant Clinical Specialist  
Small Animal Clinical Sciences*



**Justine Lee**  
*Assistant Clinical Specialist  
Small Animal Clinical Sciences*



**Claudia Munoz-Zanzi**  
*Assistant Professor  
Clinical and Population Sciences*



**Leslie Sharkey**  
*Assistant Professor  
Clinical and Population Sciences*



**Rebecca Hegstad**  
*Assistant Clinical Specialist  
Clinical and Population Sciences*



**Randy Singer**  
*Assistant Professor  
Veterinary PathoBiology*

## Encouraging Others

When Darin Madson graduates from veterinary school next spring, he'll have his hard work, supportive family, friends and a retired school nurse from California to thank.

Madson, a fourth-year DVM student, is a recipient of the Robert A. Merrill Memorial Scholarship. Established in 1994 by Barbara Merrill, the scholarship provides \$3,500 per year for up to four years for DVM students from rural Minnesota who are interested in food animal medicine.

"The scholarship has been wonderful," says Madson, who grew up on a hog farm near Glenville, Minnesota. By paying for approximately a quarter of his tuition, the scholarship has made it possible for him to broaden his horizons by visiting and learning from practices as far away as Oklahoma. He also appreciates how it affirms his choice to become a food animal veterinarian. "It means a great deal," he says.

Robert Merrill was a professor of large animal medicine at the College of Veterinary Medicine from 1950 to 1966. Before coming to the University, he practiced veterinary medicine in Clara City, Minnesota. Barbara Merrill established the scholarship in his honor as a way to encourage others who have chosen a similar career.

An alum of the University of Minnesota nursing program, Barbara Merrill recently also established an annuity with the college. This planned gift provides income to her during her lifetime and will provide further student support after her death. To learn more about opportunities for giving gifts in honor of someone or for supporting veterinary education, contact the development office at 651-624-1247.

## Dairy Barn Learning Center May Become A Reality

Generations of Minnesota veterinary students have walked by the historic dairy barn on their way to and from class each day. Future students may have an opportunity to take classes, use computers, or gather for conversation inside as well, if plans to remodel the facility into a lifelong learning center progress as planned.

As part of its 2004 bonding request to the Minnesota Legislature, the University will ask for funds to remodel the facility, built in 1907, into a combined classroom and gathering space for conventional and continuing education students. While the interior would be renovated, the exterior would be restored maintaining the original Jacobean-style architecture



## Alumni – We Want To Hear From You

We would like to feature accomplishments of our graduates in future issues of *Profiles*.

Please send us news on your career achievements, research endeavors, or personal accomplishments you would like to share with your fellow graduates.

Items should e-mailed to [pallo002@umn.edu](mailto:pallo002@umn.edu) or mailed to Marie Pallo, 1365 Gortner Avenue, St. Paul, MN 55108.

# Outreach News

VET MED

Contact Us

## New Veterinary Entrepreneurship Program

The college and Metropolitan State University jointly offered a Veterinary Entrepreneurship Program providing an opportunity for veterinary students and practicing veterinarians to interact with lawyers, bankers and accountants to learn details about joining, buying, opening or expanding a practice.

Each of the three sessions focused on a different business topic and provided a forum for discussions among the business experts, practitioners and students. This environment encouraged participants to share “real-life” experiences on many of the topics presented and filled an important niche for veterinary professionals. “Everyone should be required to take this” was the comment from one student attending.

## The Land O’Lakes Kennel Club Show

The Land O’ Lakes Kennel Club is featuring the expertise of college faculty at their annual dog show at the Minneapolis Convention Center on January 2-3, 2004. Faculty will be providing the following educational seminars on topics of importance to breeders and pet owners:

Dr. Peggy Root-Kustritz	“Contraception in Dogs”
Dr. Roberto Novo	“Why Knee Problems are a Concern in Large Breed Dogs”
	“Non-Surgical Management for Hip Dysplasia Prevention”
Dr. Julie Churchill	“Feeding Dogs for a Healthier Life”
Dr. Petra Mertens	“Behavior Problem Prevention” and “Separation Anxiety”
Dr. Jim Schoster	“Diseases of the Eye”

In addition to the seminars, Dr. Jim Shoster, a Diplomate of the American College of Veterinary Ophthalmologists, will conduct an eye certification workshop. He is qualified through the Canine Eye Registration Foundation, the mission of which is to eliminate heritable eye disease in all purebred dogs by forming a centralized, national registry.

For current programs, visit our web site [www.cvm.umn.edu/outreach](http://www.cvm.umn.edu/outreach)

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[mvd@tc.umn.edu](mailto:mvd@tc.umn.edu)  
[www.mvdl.umn.edu](http://www.mvdl.umn.edu)

### Public Relations

612-624-6228

### The Raptor Center

612-624-4745  
Fax 612-624-8740  
[www.raptor.cvm.umn.edu](http://www.raptor.cvm.umn.edu)

### Veterinary Outreach Programs

612-624-3434  
[www.cvm.umn.edu/outreach](http://www.cvm.umn.edu/outreach)

### Student Affairs and Admissions

612-624-4747  
[www.cvm.umn.edu/admissions](http://www.cvm.umn.edu/admissions)

### Development

612-624-5315

## Calendar of events

Owl Prowl at The Raptor Center	January 11, 2004
College Open House	April 4, 2004

## Mini Vet School

First conducted in 2002, “Mini Vet School” was back by popular demand this fall. Hosted by Roberto Novo, medical director at the Veterinary Medical Center and taught by college faculty, the six two-hour weekly sessions covered animal anatomy, physical exams, reproduction, cardiology, behavior, food safety, and public health. A new Mini Vet School curriculum will be offered in 2004.


# Profiles

## Credits

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Editor .....	Jan Williams
Writers .....	Mary Hoff, .....Sue Kirchoff and Jan Williams
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## Miracle of Birth – August



*Hundreds of baby lambs, pigs and calves were born over the course of 10 days.*



*The Miracle of Birth Center at the Minnesota State Fair was visited by thousands of people each day where live births were witnessed.*



*University of Minnesota College of Veterinary Medicine students worked with veterinarians and 4-H students to monitor and assist in the birth process.*

## Mini Vet School – October/November



*Close observation is the first step in evaluating this dog's health.*



*Chris Addington, St. Anthony Village, one of many happy graduates.*



*Chirhiro Gardinier, Class of 2006, helps a mini-vet school student learn how the physical examination of a cat helps a veterinarian assess the animal's health.*

## Dean's Circle Dinner – October



*Louise Leatherdale, Jeff Klausner, Diane Klausner, and Doug Leatherdale at the Dean's Circle Dinner where the Leatherdale's gift of \$1 million was announced for the Equine Center campaign.*



*Cathy Wurzer and Carolyn Marigan, VMC clients, donated their services to produce videos to promote the College's services.*



*Dean Klausner welcomes James Murphy and Sandra Smith as new members of the Dean's Circle.*

# Profiles

**College of Veterinary Medicine**  
University of Minnesota  
1365 Gortner Avenue  
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