School Readies for AVMA Accreditation Review

This year we’re once again going to undergo a rigorous test to demonstrate our ability to meet all of the standards for accreditation,” says Bennie Osburn, dean of the School of Veterinary Medicine.

The school is gearing up for the accreditation review scheduled to take place in December 2004.

On a seven-year cycle, the American Veterinary Medical Association (AVMA) Council on Education conducts an external peer review of the nation’s veterinary medical programs according to 11 Standards of Accreditation.

The standards are as follows: Organization, Finances, Physical Facilities and Equipment, Clinical Resources, Library and Information Resources, Students, Admission, Faculty, Curriculum, Research Programs, and Outcomes Assessment.

The school, when last reviewed by the AVMA in 1998, met or exceeded the requirements for 10 of the standards. Yet, due to deficiencies under the physical facilities standard, the school was awarded “limited accreditation,” which provides a period of time for correction of the deficiency and a threat of loss of accreditation unless problems are remedied.

Administrators for the School of Veterinary Medicine, UC Davis campus and University of California began a comprehensive facility planning process that included both detailed

Continued on page 2

Spay Day 2004:
Record Number of Companion Animals Spayed/Neutered in Coordinated School Effort

Izumi Toyoda, first-year veterinary student, readies her canine charge for spaying. Three hundred companion animals were spayed or neutered as part of the school’s role in Spay Day USA.

Story on page 2
NEW FACILITIES FOR VETERINARY EDUCATION

The school facilities plan includes the following buildings:

**Veterinary Medicine Laboratory Facility**
Completed and occupied in August 2002
Large and small animal student surgery and animal quarters, 90-seat classroom and other teaching space.
Cost: $16.4 million, funded by California ($3.7 million), UC Davis ($5.9 million), and private donations to the School of Veterinary Medicine ($6.8 million)

**Center for Companion Animal Health**
Completed in March 2004 (Story on page 14)
Clinical, research and teaching facility housing a comprehensive cancer center, physical therapy unit, and laboratories for oncology and genetics.
Cost: $16.4 million, building funded entirely by private donations—equipment drive is underway

**Veterinary Medicine Instructional Facility**
Groundbreaking May 7, 2004
Classrooms, auditoriums, seminar rooms and student space.
Cost: $27 million, funded by UC Davis ($22 million), the school ($2.5 million for equipment and A/V systems) and private donations ($2.5 million)

**Equine Athletic Performance Laboratory**
Groundbreaking scheduled for summer 2004
Research laboratory with both research and clinical treadmills
Cost: $4.2 million, funded by UC Davis ($1.1 million), private donations ($2.7 million) and the school ($450,000)

**Veterinary Medicine 3A and 3B**
3A: Construction is underway, completion in 2006
Teaching and research facility with clinical space, multi-purpose teaching laboratories, JD Wheat Veterinary Orthopedic Research Laboratory and space for anatomy and clinical necropsy.
Cost: $77.4 million, funded by the State of California

3B: Currently being planned
Research and administrative space for which construction would begin in 2006–2007
Cost: $69.5 million, to be funded by a proposed 2006 state bond referendum ($45.3 million), campus ($12.1 million) and private donations ($12.1 million)

Spay Day 2004: Volunteers Alter Record Number of Dogs and Cats

Imagine the orchestration required when a single patient undergoes surgery.
Multiply by 300 animals, add 400 volunteers, and you’ve got Spay Day 2004 at the UC Davis School of Veterinary Medicine.
The February 22 event, part of a national Spay Day effort, was described by dean Bennie Osburn as “the single largest spay-neuter undertaking in one location.”
The school’s participation resulted from a new partnership with the Sacramento Area Animal Coalition, a non-profit organization dedicated to reducing companion animal overpopulation. The school joined other local veterinary professionals to perform more than 1,000 low-cost procedures in a three-county region.
Sacramento Area Animal Coalition officials estimated that the spay-neuter procedures on 1,000 pets on Spay Day would prevent the births of 10,000 unwanted animals—in just one year.
The ambitious goal to spay and neuter up to 300 animals at the school was made possible by the availability of the Veterinary Medicine Laboratory Facility (VMLF), a new instructional building completed in 2002 as an initial part of the school’s facilities upgrade. The VMLF is usually employed to teach vet-

Accreditation Review
Continued from page 1

planning for new state-of-the-art teaching and research facilities, and lobbying for legislative support, state funding and private donations to replace antiquated facilities.
They agreed on a $354 million plan to build facilities that support modern biomedical teaching and research, accommodate current and projected numbers of students, are located in the same health sciences district on campus, and anticipate future programmatic needs in the School of Veterinary Medicine.
Meanwhile, the school has demonstrated continued commitment to the veterinary profession by carrying out its academic mission: to teach, attract top students, recruit the best faculty members, conduct important and relevant research, and provide the clinical service and outreach activities upon which the school’s constituents depend.

“When the buildings are complete, all teaching space, including the Veterinary Medical Teaching Hospital, will be co-located.”

“We are currently constructing the first phase of the facility plan, which includes five buildings at a cost of $140 million,” says Bennie Osburn.
“When the buildings are complete, all teaching space, including the Veterinary Medical Teaching Hospital, will be co-located.
“We are committed to passing the upcoming review, and hope the building plan, completed facilities and construction in progress will be viewed as meeting the spirit and intent of the facilities standard, such that the school’s status will be restored to full accreditation.”
Veterinary Family Practice Reflects Human-Animal Bond

Pets in more than half of America’s households are considered members of the family, according to the American Animal Hospital Association.

The close relationship between companion animals and humans has led not only to an increase in sophisticated veterinary care provided by specialists, but also to awareness that the general veterinary practitioner is a key component in the human-animal relationship. Advice and services provided by the family veterinarian affect every family member—human as well as animal.

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In recognition of the importance of animals in our lives, UC Davis is building a new program, Veterinary Family Practice, that strengthens the concept of the vital role general practitioners play in supporting the human-animal bond.

Under the leadership of Dr. Rick Timmins, Veterinary Family Practice reflects a philosophy and responsibility that applies to more than providing essential services to the animal itself—it also promotes the role of the veterinary general practitioner in the health and welfare of the family as a whole.

Dr. Timmins says, “Veterinary practitioners now have the option of referring cases to a growing number of private specialty practices (for example, California now has 121 veterinary specialists in internal medicine, 33 in ophthalmology, and 113 in surgery). The explosion of client requests for referrals to specialists to pursue sophisticated diagnostics and therapies has created a need for a new ‘specialist’—the veterinary family practitioner.”

“Family practice is not really a new paradigm in veterinary medicine—concern for the human-animal bond has driven veterinarians for years,” says Dr. Timmins. “The primary focus on the well-being of the pet is still the same, but both the relationship and professional technology have changed dramatically, requiring new mandates on how to interact with clients and patients most effectively.”

The veterinary family practitioner’s role begins with selection of an appropriate pet—an important issue in the question of how to prevent relinquishment of animals. In addition to traditional medical and surgical skills, that role requires special expertise in life stage management, behavior consulting, nutrition, immunization, parasite control, familiarity with special issues such as complementary medicine (homeopathy, acupuncture, nutraceuticals, chiropractic, etc.), referrals, support networks, special needs communication, and pet overpopulation and control.

The current UC Davis DVM curriculum already includes practical instruction in many family practice issues. As the new program develops, the range of instructional opportunities in veterinary family practice will be expanded.

Pet Loss Support Hotline coordinator Bonnie Mader, MS, and Shelter Medicine Program director Kate Hurley, DVM, are developing workshops in veterinary family practice that will be conducted for veterinary students next fall.

Pets in more than half of America’s households are considered members of the family.

Together, the California Veterinary Medical Association and UC Davis are creating a task force to identify the skills and knowledge required to become an effective veterinary family practitioner, in order to create a certification program in Veterinary Family Practice for veterinarians and their hospitals.

Dr. Timmins says, “It is important to get input from the profession, not just in the initial stage, but also on a continuing basis as the program evolves. I hope eventually to see Veterinary Family Practice become a board-certified specialty.”

A Veterinary Family Practitioner Needs Widening Range of Skills

To meet the needs of the contemporary companion animal and its family, a primary care family practice veterinarian needs a widening range of new and different skills in the following areas:

- Optimizing relationships with clients, referral veterinarians and support groups
- Communicating with adults, children, and elderly clients; delivering bad news; managing emotions
- Providing elements of a supportive environment for the client—accommodating the client’s emotional, psychological, spiritual and physical needs
- Referring appropriate cases, and managing referred cases as an advocate for the patient and interpreter for the client
- Engaging in team leadership—the patient management team may also include veterinary staff, referral practices, emergency clinics, animal advocates, community workers and caregivers
- Dealing with animal-human issues during disasters and evacuations
- Caring for working and athletic animals
- Handling geriatrics, end-of-life issues and hospice care
- Recognizing and reporting zoonoses (diseases transmissible between animals and humans)
The news December 23 that a cow with bovine spongiform encephalopathy (BSE) had been found in the state of Washington shook consumer confidence and rocked the beef and dairy industries, and the discovery has again demonstrated our vulnerability in the United States to emerging animal and zoonotic diseases.

BSE is more than just a food animal issue—it affects the feeding and handling of livestock, the oversight of regulators responsible for food safety, and the health of non-food species such as cats. The threat of BSE has raised environmental concerns about disposal of “downer” animals and spurred the study of related diseases in wildlife.

“The economic and public health importance of BSE again highlights the need for veterinary medicine in addressing societal issues.”

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“The veterinary profession has the responsibility to ensure that all its members are properly trained to recognize prion diseases, which affect both humans and animals.”

The school also has sent faculty members to the United Kingdom and Iowa (home of the National Veterinary Services Laboratories) for training to recognize BSE in the laboratory, and to the European Union, as part of a U.S. delegation, to review identification and surveillance systems for tracing cattle movement, regulations, and other approaches to BSE prevention.
A five-member faculty research team has developed a rapid and highly sensitive test to prevent BSE transmission through animal feed.

The test will assist feed processors, producers, veterinarians and regulatory agencies in screening feed products for contamination by prions, the abnormal cell proteins that trigger the disease.

The test uses DNA analysis to identify protein from ruminants—cows, sheep, goats and deer—in feed products intended to be eaten by other ruminants.

The use of ruminant protein in livestock feed has been banned in the United States since 1997 because evidence suggests that livestock feed containing material from the carcasses of animals infected with mad cow disease can transmit the disease to healthy animals and, in turn, to humans.

A paper reporting development of the test is now under review by a peer-reviewed scientific journal. The University of California also has filed a patent application on the new procedure, which might be available for commercial use late this year.

Led by Veterinary Medicine Teaching and Research Center director James Cullor, the research team included Dairy Food Safety Laboratory staff researchers Mary Sawyer, Wayne Smith, graduate student Gabriel Rensen, and school dean Bennie Osburn.

Up until now, federal regulators have used either microscopic analysis or more rapid antibody-based tests to monitor feeds for contamination, but both types of tests have drawbacks.

The microscopic analysis, which looks for bone, hair and muscle tissue, is a tedious process that can take days to perform. The antibody tests are much quicker, but may fail to detect contamination if it occurs at levels lower than one percent.

The UC Davis researchers used a technique called polymerase chain reaction (PCR)—a technique commonly used for more than a decade in a broad spectrum of studies—to replicate selected stretches of DNA and accurately identify them.

They spiked seven different cattle feeds with predetermined amounts of meat and bone meal from cows; meal rendered from fish, sheep, and poultry; and dried blood from pigs and cattle.

DNA was then extracted from each of the spiked feed samples and replicated via PCR. The test detected ruminant DNA contamination well below 0.5 percent by weight.

Grants from The Bernice Barbour Foundation, the California Dairy Research Foundation and the Lorna Talbot estate supported the research.

DNA Test Aims to Detect Protein Contaminants in Ruminant Feed

Bovine spongiform encephalopathy (BSE), commonly known as mad cow disease, was first recognized in Great Britain in 1986. The epidemic of BSE that followed involved more than 178,000 cattle there and spread to other European nations.

BSE is caused by abnormal cell proteins (prions) which are found in brain and lymphoid tissues. Abnormal prions cause transmissible spongiform encephalopathies (TSEs) in a variety of animals in addition to cattle—sheep (scrapie), mink (mink encephalopathy), people (kuru, Creutzfeld-Jakob disease and variant CJD), cats (feline encephalopathy), deer and elk (chronic wasting disease or CWD).

The primary means of transmission of BSE is through ingestion of affected brain or spinal cord material—neurological disease in cattle, cats and people has been associated with eating meat and bone meal contaminated with prions. The prions cause disease by triggering a slowly developing chain reaction of similar protein mutations. After infection, the disease usually takes years to develop.

The prions eventually accumulate in the brain and cause debilitating symptoms of neurological degeneration (loss of balance, tremors, wasting) and eventually death.

Slightly more than 150 humans, worldwide, have contracted the fatal prion disease called new variant Creutzfeldt-Jakob disease, most of these cases occurring in Great Britain. It is believed these people became infected with prions due to eating meat from cows that had BSE.

Gabe Rensen, PhD student, spikes cattle feed with a mixture of bovine meat and bone meal to demonstrate a new test, announced in February, that utilizes microbiology to reveal animal protein contamination in livestock feed.

Use of ruminant protein in animal feed is banned in the United States because, if ingested, protein from BSE-infected animals could transmit the disease to other animals.

Carmela Jaravata, PhD student in the Microbiology Graduate Group, extracts DNA from cattle feed to test for ruminant protein.
EMERGENCY VOLUNTEERS

VMTH RESCUE TEAM ON CALL TO AID ANIMALS

The school’s Veterinary Emergency Response Team (VERT), which includes faculty, staff and student volunteers trained and experienced in emergency medicine and rescue techniques, has been involved in numerous animal rescue operations for more than a decade—from helping local animals to assisting faraway communities that experience disasters such as North Carolina’s Hurricane Floyd in 1999.

For example, last summer Placer County Sheriffs called VERT, based at the Veterinary Medical Teaching Hospital (VMTH), in June with a request to rescue an Arabian gelding. The horse had fallen from a narrow trail and landed on a ledge 800 feet below. The UC Davis team outfitted the horse with a specially designed sling, and he was airlifted to safety. In August, Nellie, a mule from the Pine Creek Pack Station fell about 100 feet off a rain-slickened trail near Bishop, California, sustaining a fractured pelvis and leg wound. Bishop veterinarian David Doonan (UC Davis, DVM, 1990) joined packers and Department of Forestry rangers to aid the stranded mule, treating her wounds and bringing in food, but they were unable to get Nellie off the mountain. Dr. Doonan called VERT to help Nellie out of her predicament, and a privately chartered helicopter airlifted Nellie to a safe location. Funds for the rescue were provided by private donors.

For more information, visit the VERT Web site (www.vmth.ucdavis.edu/home/VERT/) and the Center for Equine Health Web site (www.vetmed.ucdavis.edu/ceh).

Spay Day 2004

Continued from page 2

ordinary students anesthesia and surgery skills. For Spay Day, the facility, with its 28-table surgical suite, served a large-scale clinical purpose.

Coordinators spent countless hours organizing the event and recruiting clinicians, technicians, students and other volunteers for each task. “We knew exactly what each student volunteer and staff member was qualified for because we’ve been teaching them all along,” said Jan Ilkiw, associate dean for Academic Programs and the school’s Spay Day coordinator.

Students served in the role of pet guardians. They met with clients and, throughout the process, handled and cared for animals assigned to them. Faculty and resident clinicians conducted health exams, pre-medication, anesthesia and surgery. Experienced students assisted with anesthesia, surgical preparation, lab testing and other selected procedures.

The surgical team began promptly at 6:30 a.m. with animals that were admitted the previous evening. Clients continued to bring in animals by appointment throughout the day; the last dogs and cats were taken home by their caregivers, along with home care instructions, after nightfall. The cats and dogs also received diagnostic tests, vaccinations and microchip identification.

...officials estimated that the spay-neuter procedures on 1,000 pets on Spay Day would prevent the births of 10,000 unwanted animals in just one year.

Among the volunteers were staff members from the California Animal Health and Food Safety Laboratory, Veterinary Medical Teaching Hospital, Veterinary Medicine Extension and other units; residents in dermatology, internal medicine and other specialties; office staff and data managers; and non-clinical faculty.

“Spay Day provides a major community service,” says Dr. Ilkiw. “We gladly volunteer resources and expertise for this extraordinary event, to benefit animals now and help in the long-term fight against pet overpopulation.”
**Preventing and Controlling Zoonotic Diseases Requires a Comprehensive Approach**

Zoonotic diseases—those that can be naturally transmitted between animals and humans—have dramatically increased during the last 100 years. Dr. Chomel, who is an authority on the epidemiology of zoonotic diseases, attributes some of that rise to an increase in the global human population from 1 billion to 6 billion, increased global travel and trade, and globalization of the food supply. Dr. Chomel, who published an overview of emerging zoonotic diseases last summer in the *Journal of Veterinary Medical Education*, says, “To effectively prevent and control zoonotic diseases, the scientific and health communities need to develop a discovery-to-control continuum, ranging from recognition and identification of these diseases to diagnosis training and communication.”

During the past 20 years, Dr. Chomel notes, major progress has been made in identifying disease-causing agents that are transmitted by insects and ticks, especially bacteria that are carried by ticks and cause diseases like cat-scratch disease and Lyme disease. The rate of discovery of viral zoonotic diseases has been even greater, with several rodent-borne viruses like the hantaviruses and arenaviruses identified in North and South America during the past decade.

Part of this success is due to the availability of new tools and procedures in the field of microbiology that help scientists accurately identify pathogens and the diseases they cause. But Dr. Chomel points out that, with the rise in the number of outbreaks of zoonotic diseases as well as the new and looming threat of zoonotic agents being used as biological weapons, there is an acute need for developing a comprehensive approach to preventing and controlling zoonotic diseases.

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He suggests that such an approach should include improved capabilities in recognizing emerging zoonotic diseases; collaborative, multidisciplinary research; international partnerships for disease diagnosis and surveillance; improved education and training for professionals who may be the first to see cases of human and animal disease; and new strategies for disseminating information about emerging diseases.

Dr. Chomel has studied Bartonella infections, cat-scratch disease, hantavirus, rabies and plague and conducted many infectious-disease surveys of wildlife.

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**BARTONELLA CHOMELII**

**NEW SPECIES NAMED FOR PROFESSOR**

A new Bartonella species, isolated from a French cow, has been named *Bartonella chomelii* in honor of Bruno B. Chomel, professor of zoonoses at the School of Veterinary Medicine.

The new species of bacteria is cited in the August 2003 issue of the *International Journal of Systematic and Evolutionary Microbiology*.

Dr. Chomel is the first scientist to isolate *Bartonella bovis* from domestic cattle. He also is the first to experimentally demonstrate the transmission of *Bartonella henselae* by fleas in cats. He has contributed to an improved understanding of epidemiology and vectors of Bartonella-associated disease in animals.

*Bartonella* is the bacterial agent of cat-scratch fever, a usually mild disease in people that can become a serious health problem in immunocompromised individuals. Dr. Chomel has assisted in isolating species from wild and domestic animals, including cattle and cats, throughout the world in countries such as the Philippines, Italy, the United States, France and Denmark.

Dr. Chomel’s research team has learned that distribution of *Bartonella* among ticks appears widespread in California, and that California coyotes show signs of *Bartonella* exposure.

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VETERINARY MEDICINE NEWS, UC DAVIS, SPRING 2004
A new one-year residency in clinical veterinary pharmacy, based at the Veterinary Medical Teaching Hospital (VMTH), provides practical training in the principles of animal medicine for pharmacists. The program is open to graduates of accredited schools of pharmacy, who are already trained extensively in pharmacology related to human medicine and who will obtain a California Pharmacy License.

“There is an ever-increasing complexity to what we do as pharmacists,” says Valerie Wiebe, Pharm. D., chief clinical pharmacy coordinator at the UC Davis School of Veterinary Medicine. “This is the first in-depth program for the pharmacist in a veterinary setting.”

Residents will learn about drug effects on different species, expand their knowledge of veterinary-labeled drugs, and design a clinical drug study. They will have the opportunity to build research skills useful in pharmaceutical development or animal health research, and develop an understanding of regulatory matters pertaining to livestock and food safety.

“This profession has lots of niches in which pharmacists can become pioneers,” says Dr. Wiebe. After completing the program, veterinary pharmacists may pursue careers in academic institutions—primarily veterinary schools—pharmaceutical companies, or regulatory agencies.

The program’s first resident is Margo Karriker, who earned her Doctor of Pharmacy (Pharm. D.) degree from the University of North Carolina Chapel Hill School of Pharmacy. Her mentors include Robert Mowers, Pharm. D., clinical instructor at the UC Davis Medical Center (UCDMC), and Greg Wurz, supervisor of the pharmacokinetics laboratory at UCDMC, Gail Moniz, R.Ph, chief of Pharmaceutical Services at the VMTH, and Dr. Wiebe, who supervises the residency program.

The program was originally conceived by veterinary pharmacist Reed Enos, who presided over the VMTH pharmacy for 37 years before his retirement in 2001. The VMTH has funded the first resident and seeks ongoing private or corporate funding to support future residents.

“Recognizing a clear need to train pharmacists in the specialty, the School of Veterinary Medicine took the leap,” says hospital director Bradford P. Smith. “We are excited about our first resident and the contributions she will make to both our professions.”

More information about this and other residencies at the UC Davis School of Veterinary Medicine is available on the VMTH Web site (www.vmth.ucdavis.edu).
Residency (small animal medicine), The Ohio State U., 1998–2001
Internship, Animal Medical Center, NY, 1998

**Specialty**
Pathogenesis, diagnosis and treatment of lower urinary tract diseases of dogs and cats

**Barbara Byrne**
Assistant professor, Pathology, Microbiology and Immunology

**Education**
PhD (microbiology), Washington State University, 1998
DVM, Colorado State University, 1987

**Experience**
Diplomate, American College of Veterinary Internal Medicine, 1992
Asst. prof. (veterinary microbiology), Purdue U., 1990–2003
Residency (equine internal medicine), The Ohio State U., 1989–1991

**Specialty**
Microbial diseases of profound economic importance to the equine industry, Rhodococcus equi infections

**K. Gary Magdesian**
Assistant professor, Medicine and Epidemiology

**Education**
DVM, UC Davis, 1993

**Experience**
Diplomate, American College of Veterinary Emergency and Critical Care
Residency (large animal emergency and critical care), UC Davis, 2000
Clinical instructor (equine medicine and critical care), UC Davis, 1998–2003
Residency (large animal internal medicine), UC Davis, 1997
Internship (large animal medicine and surgery), Texas A&M University, 1994

**Specialty**
Equine medicine: infectious and neonatal diseases, critical care of horses

**Aaron Brault**
Assistant professor; Pathology, Microbiology & Immunology; Center for Vector-Borne Diseases

**Education**
PhD (arbovirology), University of Texas Medical Branch, 2001
BS (zoology), Texas A&M University, 1995

**Experience**
Post-doctoral fellow, Centers for Disease Control & Prevention, Ft. Collins CO, 2001–03

**Specialty**
Arbovirology, molecular tools for evaluation of the biologic properties of arthropod-borne diseases, epidemiology of West Nile encephalitis virus in North America and potential biological control measures

**Janet Foley**
Assistant professor, Medicine and Epidemiology;
Center for Vector-Borne Diseases

**Education**
PhD (ecology), UC Davis, 1997
DVM, UC Davis, 1993
MS (evolution), George Mason U., Fairfax VA, 1987

**Experience**
Acting chief, VMTH Microbiology Service, 2001–2
Director, Maddie’s Shelter Medicine Program, 2001–2
Research epidemiologist, UC Davis, 1997–2002

**Specialty**
Epidemiology of vector-borne and zoonotic diseases, tick-borne infections

**Bruce Hoar**
Assistant professor, Medicine and Epidemiology

**Education**
PhD (epidemiology), UC Davis, 2001
MVS (epidemiology), Western College of Veterinary Medicine, Saskatoon, Saskatchewan 1996
DVM, Western College of Veterinary Medicine, Saskatoon, Saskatchewan, Canada, 1985

**Experience**
Postgraduate researcher, UC Davis, 2001–3
Fellow, California Veterinary Public Health Section, CA Dept of Health Services, 2000–2001
Partner, (mixed practice) Foam Lake Veterinary Services

**Specialty**
Ruminant herd health, infectious diseases associated with beef cattle, potential zoonotic pathogens and disease risk

**Oisin**, a Connemara Pony gelding, is participating in a study carried out by Dr. Alain Theon, radiation oncologist in the Center for Equine Health.
A pioneer in zoological medicine and an expert in companion animal medicine were chosen to receive the 2003 Alumni Achievement Award, the highest honor bestowed by the School of Veterinary Medicine.

■ Mitchell Bush, DVM, was recognized for leadership and exceptional contributions in modern zoological medicine. ■ Gerald Ling, DVM, was honored for excellence in teaching, research and service as a school faculty member for 35 years. Each earned a DVM degree from UC Davis in 1965.

Dr. Bush joined the staff of the National Zoological Park of the Smithsonian Institution, Washington, DC, in 1972 and has served as chief of veterinary services of the Conservation and Research Center for 10 years. He has been active in research studies in zoological and comparative medicine, and has developed training programs for zoo veterinarians and around the world. Dr. Bush is also assistant professor in the Department of Comparative Medicine at the Johns Hopkins Medical School, Baltimore. As visiting scientist at Kruger National Park, South Africa, he serves as veterinary advisor for Species Survival Plans for the cheetah, golden lion tamarin, maned wolf, tree kangaroo, red panda and lion. Dr. Bush is a charter diplomat of the American College of Zoological Medicine and former president of the American Association of Zoo Veterinarians.

Dr. Ling joined the UC Davis faculty in 1968, influencing the early development of training programs for veterinary students and veterinarians in endocrinology, hematology and internal medicine. He also helped establish both the Small Animal Emergency and Small Animal Outpatient Services at the Veterinary Medical Teaching Hospital. Dr. Ling’s research focused on diseases of the lower urinary tract in dogs and cats. He devised several techniques now routinely used by clinicians for diagnosis and treatment of small animal urinary problems. He developed a laboratory to analyze urinary stones of dogs and cats and to provide suggested treatments. Dr. Ling, who received the 2002 Faculty Teaching Award, has helped educate an estimated 3,600 veterinary students during his career.

TWO RECEIVE ALUMNI ACHIEVEMENT AWARD

Barry Ball, professor, who holds the John Hughes Endowed Chair in Equine Reproduction, received the 2003 Carl J. Norden Distinguished Teacher Award.

Richard Breitmeyer (DVM 1980, MPVM 1990, UC Davis), California State Veterinarian and Director of Animal Health and Food Safety at the California Department of Food and Agriculture (CDFA), received the Golden Rooster Award from the California Poultry Federation last September for his leadership in battling an outbreak of Exotic Newcastle Disease in Southern California. Dr. Breitmeyer oversees CDFA programs for animal health, milk and dairy foods control, meat and poultry inspection, and livestock identification.

Jeffrey Bryan (DVM, UC Davis, ’93), won the E. Gregory MacEwen Memorial Award for the Outstanding Basic Research Project in Oncology, given by the Veterinary Cancer Society at its 2003 Annual Conference. His research project was titled “Copper-64-labeled Antibodies for Radioimmuno-therapy of Cancer.”

Carol Cardona, assistant professor and Veterinary Medicine Extension specialist, received the Bayer-Snoeck-Enbos New Investigator Award from the American Association of Avian Pathologists in July, 2003, for meritorious research contributions to the North American poultry health program. Dr. Cardona’s research emphasizes infectious diseases in poultry, particularly those of viral origin.

Salvatore Cirone (MPVM, UC Davis, ’76), received the 2003 James A. McCallam Award by the Association of Military Surgeons of the United States in recognition of his outstanding accomplishments in the field of medicine and health, and for his medical support and policy development during more than 36 years government service, including nearly 30 years in the U.S. Army Veterinary Corps. Dr. Cirone, currently with the Office of the Assistant Secretary of Defense (Health Affairs), has oversight of health science policy for one of the largest medical systems in the world. Dr. Cirone also has played a key role in preparing senior political leadership for Senate and House of Representatives hearings, and in developing policy for DNA testing for remains identification, new drug investigation, and animal care and use.

Autumn Davidson, associate clinical professor of internal medicine and reproduction, and director of veterinary medicine for the San Rafael campus of Guide Dogs for the Blind, received the 2003 Hill’s Animal Wellness Humanity Award from the American Animal Hospital Association.

Patricia Conrad, professor, is one of 20 academic environmental scientists and the first veterinarian to be awarded the 2004 Aldo Leopold Leadership Fellowship. The Aldo Leopold Leadership Program provides scientists with intensive training in effective communication with non-scientific audiences, especially policy makers, the media, business leaders and the public. Dr. Conrad’s research emphasizes protozoans—one-celled parasites that infect wildlife, humans and domestic animals.

Harold Davis, RVT, supervisor of the Small Animal Emergency Nursing Service and coordinator and instructor of the Hospital Practices course for veterinary students, was honored by Hill’s Pet Nutrition as the inaugural Jack L. Mara Memorial Lecturer last January. Dr. Mara, long-time director of veterinary affairs for Hill’s, recognized the huge role veterinary technicians play in quality patient care. Mr. Davis is one of the first technicians to receive certification as a Veterinary Technician Specialist, and he is board certified both in Emergency & Critical Care and as a Veterinary Technician Anesthetist. He cofounded the Academy of Veterinary Emergency and Critical Care Technicians and has written, published and presented on emergency, critical care, nursing and technical topics for more than 20 years.

Douglas DeBoer (DVM, UC Davis, 1981), associate professor of vet-
erinary dermatology at the University of Wisconsin, Madison, School of Veterinary Medicine, received the American College of Veterinary Dermatology’s 2003 Award for Excellence, based on his outstanding contributions to science and education. Dr. DeBoer teaches dermatology, provides clinical service and studies ways to improve dermatological treatments. He was board-certified in veterinary dermatology in 1987.

James Maclachlan, professor, received the 2003 Pfizer Animal Health Award for Research Excellence. Dr. Maclachlan directs the Gloria and Bernard Salick Equine Viral Disease Laboratory, and conducts basic research on viral disease organisms through the Bernice Barbour Communicable Disease Laboratory.

Mercer Veterinary Clinic for Pets of the Homeless received a UC Davis Community Service Award in May 2003. Congratulations also go to award recipient Kim Bahrami, class of 2006. The campus group Human Corps, sponsor of this event, promotes community service and leadership.

Melissa A. Miller (DVM 1994, PhD 2002, UC Davis), was named Fellow of the Morris Animal Foundation, which honors students who participate on the investigative teams of foundation-funded animal health studies. Dr. Miller, staff veterinarian at the school’s Wildlife Health Center, studies emerging wildlife diseases, particularly in sea otters.

Bennie Osburn was elected in November 2003 as a Distinguished Member of the American College of Veterinary Pathologists (ACVP) in recognition of his pivotal research in ontogeny of the fetal immune response, his service to the profession through involvement in the AVMA and other professional organizations, and his leadership—as dean of the UC Davis School of Veterinary Medicine and as past president of the ACVP. Dr. Osburn also received the 2004 Distinguished Alumnus Award from Kansas State University.

Ken Pawlowski (DVM, UC Davis, 1996), charter owner and chief of staff at Banfield Pet Hospital in Folsom, was chosen last June as Outstanding DVM of the Year by California registered veterinary technicians (RVTs). The California Veterinary Medical Association, which represents more than 4,600 veterinary professionals in the state, presents the award to a veterinarian who encourages and supports certified RVTs and utilizes RVTs and staff to their fullest potential. Dr. Pawlowski serves on the Animal Care Advisory committee for the City of Sacramento and is a CVMA Delegate for the Sacramento Valley Veterinary Medical Association.

Quinton Rogers, professor, was elected Fellow of the American Society of Nutritional Sciences.

Eugene Steffey, professor, was awarded and honorary doctorate, Doctor honoris causa, Dies academicus, in 2003 by the University of Berne, Switzerland.

Hanspeter Witschi, MD, professor of toxicology in the Schools of Medicine and Veterinary Medicine, received the 2004 Herbert E. Stokinger Award for a significant contribution to the field of industrial and environmental toxicology. His research has focused on beryllium toxicity and on mechanisms of acute and chronic lung disease caused by industrial and environmental pollutants. He currently studies chemoprevention of lung cancer in animal models of tobacco smoke carcinogenesis.

Tilahun Yilma, professor of virology and director of the International Laboratory of Molecular Biology for Tropical Disease Agents, was elected in April 2004 to the National Academy of Sciences, one of the highest honors accorded to scientists and engineers in the United States. Dr. Yilma, born in Ethiopia, earned his DVM degree from UC Davis in 1970. He then returned to Ethiopia and for two years vaccinated nomadic cattle herds against rinderpest, a deadly viral disease affecting cattle and wildlife. In 1977, he earned a PhD degree in microbiology and joined the UC Davis faculty. He also worked for three years at the U.S. Department of Agriculture’s Plum Island Animal Disease Center in New York. In 1986 Dr. Yilma developed a genetically engineered vaccine for rinderpest, approved in 1997 for use throughout Africa. He developed rinderpest diagnostic kits and organized training programs to make the kits available to African scientists. His current research is aimed at developing an AIDS vaccine and improved smallpox vaccine. He has also devoted extensive efforts to securing funding for biotechnology laboratories in developing nations.

IN MEMORIAM

Nancy Bruss, who formerly served as CE coordinator in the Dean’s Office, died Oct 8, 2003 after a 10-month battle with brain cancer. She was 56.

Donald Cordy, professor emeritus, founder of the department of veterinary pathology and charter member of the American College of Veterinary Pathologists, died January 23, 2003. He was 90.

Bernard “Bernie” F. Feldman (PhD, comparative pathology, UC Davis), professor, Virginia-Maryland Regional College of Veterinary Medicine, Virginia Tech, was killed in an automobile accident February 19, 2004. He was 66. Dr. Feldman, a clinical pathologist and hematologist, was a professor of clinical pathology at UC Davis for 22 years.

Charles Franti, professor emeritus in biostatistics, died at his Davis home of cardiac arrest on May 26, 2003. He was 70. He joined the faculty in 1967 and also taught statistics for many years in the school’s MPVM program.

Jacqueline (Grandy) LeCouteur died peacefully at home on April 27, 2003, after a long battle with breast cancer. She was 51. Dr. Grandy was a postgraduate researcher working on brain tumor research with her husband Richard LeCouteur.

Arthur Hazarabedian, class of ’59, died March 31. Dr. Hazarabedian served as chair of the Armenian Technology Group, a collaboration between UC Davis and Armenia for animal health research and technology transfer.

Olaf Hedstrom, class of ’76, died February 11, 2003. He was 54. Dr. Hedstrom was a veterinary pathologist, diagnostician, and associate professor at Oregon State University.

Jack Moulton, professor emeritus, died May 3, 2003. He was 81. Dr. Moulton was a faculty member in pathology from 1953 until he retired in 1987, and a veterinary officer in the U.S. Dept. of Health, Education and Welfare. His book, Tumors in Domestic Animals, is still used in veterinary schools around the world.

Harold “Hal” Parker, class of ’52, who served as a faculty member in both physiology and surgery, died at his home in Davis July 31, 2003. He was 83. As an undergraduate, Dr. Parker founded the Pre-Vet Association and participated in the school groundbreaking. Dr. Parker’s research focused on renal function and electrolyte balance in pets and domestic animals. He developed an intensive care unit that later became a model for small animal ICUs worldwide.

Berwyn Richards, class of ’52, died June 4, 2003 at 83. Dr. Richards practiced equine, bovine and small animal medicine in Santa Rosa for 32 years.
ENDOWED FELLOWSHIP HONORS TRADITION OF VETERINARY ANATOMIC PATHOLOGY

A ceremony was held last September to celebrate successful completion of a two-year campaign to establish the Peter C. Kennedy Endowed Fellowship in Veterinary Anatomic Pathology.

The fellowship invests in the future of a training program that for more than 50 years has graduated many of the leading scientists in governmental laboratories, educational institutions and major corporations. It recognizes Dr. Kennedy for his pioneering efforts to establish veterinary pathology as a scientific discipline and profession, and honors Dr. Kennedy and his colleagues, who have built a tradition of excellence in training DVM and PhD students in anatomic pathology at UC Davis.

ENDOWED FUND FOR CANCER RESEARCH HONORS BELOVED COMPANION ANIMAL

After Maxine Adler lost her cat, DuBee, to cancer, she made a donation to UC Davis to help animals. During the last seven years, she has contributed nearly $1 million to support cancer research at the Center for Companion Animal Health (CCAH). She established the DuBee Cancer Research Endowed Fund with a gift of $100,000 in 1999, and last year created a trust that will transfer the remainder of her estate to the fund after her death.

“I often claim that losing DuBee was the worst thing that ever happened to me,” says Ms. Adler. “But I’m happy that I can support research that is helping animals with cancer—and even leading to discoveries that can help people with cancer.”

The DuBee Fund provides annual research awards to faculty and residents whose work at the CCAH significantly advances cancer treatment, prevention and diagnostic techniques.

GIFT SUPPORTS SCHOOL’S TEACHING, RESEARCH AND PUBLIC SERVICE MISSION

In December 2002, Jerry (class of 1953) and Joyce Barnier established a $1 million charitable gift annuity to assist the teaching, research and service mission of the School of Veterinary Medicine. Their gift sprang from the idea of giving something back to the school, and seeing the school regain full accreditation.

Dr. and Mrs. Barnier attended the 50th Anniversary Reunion of his class at UC Davis in June 2003. Sadly, Dr. Barnier passed away after suffering a heart attack in August 2003. After they were married, Dr. Barnier worked a year for Mrs. Barnier’s father, a veterinarian who encouraged him to attend veterinary school. The Barniers founded West Valley Veterinary Hospital in Kent, Washington in 1954, and also owned Spring Glen Veterinary Hospital in Renton, Washington, for 30 years. Mrs. Barnier worked side-by-side with her husband as bookkeeper and in other capacities throughout his entire career.

GIFT EXPANDS DONALD G. LOW-CVMA FELLOWSHIP OPPORTUNITIES

The Donald G. Low—CVMA (California Veterinary Medical Association) Fellowship allows practitioners to interact with faculty members and students in the practitioner’s area of interest, either in the clinical setting of the Veterinary Medical Teaching Hospital or in other school programs, laboratories and research centers.

Dr. Bill Steinmetz is a strong supporter of the fellowship concept. In April 2003 he gave the Low Fellowship program $25,000 to provide more practitioners the opportunity to engage in a unique continuing education experience at UC Davis. For more information about the Low Fellowship, visit the continuing education Web site (www.vetmed.ucdavis.edu/ce).
The second graduating class (1953) of the UC Davis School of Veterinary Medicine, celebrating their 50th anniversary, created a ceremonial bouquet representing each member of the class, and attended Commencement 2003 as honored guests.

As part of their 50th reunion, the class of ’53 presented the school with a $75,000 gift to support student-oriented upgrades to the planned Veterinary Medical Instructional Facility. Dr. Jack Pflock, Dr. James Bittle, Mrs. Ruth Bittle and Dr. Arthur Eisenhower attended the class reunion last June.

VMIF

The Veterinary Medicine Instructional Facility (VMIF) is the heart of a new veterinary medical campus scheduled for construction near the existing Veterinary Medical Teaching Hospital. It will be the premier veterinary teaching facility of its kind in the nation.

The class of 1953 gift allows the classmates to name the VMIF faculty/alumni conference room (artist’s rendering, above and right). Student spaces, designed for interaction as well as quiet or individual study, will be near the school’s other instructional, clinical and laboratory buildings, and will meet one of the needs for the reinstatement of a full accreditation rating from the AVMA. The VMIF groundbreaking was held May 7, 2004.

As part of their 50th reunion, the class of ’53 presented the school with a $75,000 gift to support student-oriented upgrades to the planned Veterinary Medical Instructional Facility. Dr. Jack Pflock, Dr. James Bittle, Mrs. Ruth Bittle and Dr. Arthur Eisenhower attended the class reunion last June.

“The Giving Back” to the Profession—Enhancing First New Classroom Building in Decades

The Veterinary Medical Instructional Facility (VMIF), scheduled to be completed in 2006–07, will be the school’s first permanent classroom building to be constructed in 30 years. The VMIF is the critical component for the restoration of full accreditation, after the American Veterinary Medical Association put the school on “limited accreditation” in 1998 due to outdated, inefficient and undersized instructional space.

The VMIF is part of a five-year, multi-phase plan to develop a new veterinary medical campus located in the vicinity of the Veterinary Medicine Teaching Hospital (VMTH), which will enable UC Davis to accept more students into the DVM degree program. While UC Davis is providing $24.5 million for the basic VMIF, a volunteer committee of California veterinarians is working to raise an additional $2.5 million in private support to add important student-oriented upgrades to the facility.

Private support will fund interactive meeting space, advanced instructional technology, conference rooms, and offices for student clubs and the nationally recognized Pet Loss Support Hotline.

Enhancements to the facility will include spaces suited for class reunions, faculty activities, lecture series, and Continuing Professional Education programs.

Each of the first-, second-, and third-year classes will, for the first time, have a commons or “home room” in the VMIF where they will be able to study or just relax between classes.

The campaign to raise funding for the enhancements has netted a significant portion of the $2.5 million goal, yet there is still a need for nearly $1 million to provide the additional educational resources for the VMIF.

VMIF campaign co-chair and alumnus Michael Floyd says, “Our faculty and staff need our support to construct a building that matches the caliber of their DVM training program.”

The committee is seeking, in addition to cash contributions, multi-year pledges and gifts of appreciated property or real estate from fellow veterinarians, alumni, and friends of the school.

For more information, contact the school’s development office, (530) 752-7024, or Kelly Nimtz, assistant dean for development, kjsalzrite@ucdavis.edu.
Heritage Society for Animals Celebrates Veterinary Medicine with Annual Luncheon, Mini-Symposium and Induction of New Members

The names of new members (13 in 2003 and 16 in 2004) of the Heritage Society for Animals have been added to the commemorative plaque on display at the Veterinary Medical Teaching Hospital (VMTH).

The society was established in 1997 to recognize special friends of the school who provide charitable contributions through wills, bequests and other planned gifts.

The School of Veterinary Medicine hosts an annual luncheon in April at which Heritage Society members are the guests of honor.

The luncheon program includes introduction of new members (Dean Osburn presents each of the new honorees with a handsome Heritage Society pin) and a keynote address—last year Dr. Andrea Fascetti presented Integrating Small Animal Clinical Nutrition into Veterinary Practice, and this year Dr. Walter Boyce presented Mountain Lions: Finding the Balance Between People and Wildlife.

The luncheon is held on the UC Davis campus in the Buehler Alumni and Visitor’s Center, followed by a viewing of the plaque and tours of the Veterinary Medical Teaching Hospital and the Center for Companion Animal Health.

New Center for Companion Animal Health Expands Clinical and Research Facilities

The new Center for Companion Animal Health (CCAH) facility, completed in March, is the largest center of its kind in the world.

Funded entirely by private donations, this premier facility includes a comprehensive cancer clinic, physical therapy unit and laboratories for the study of genetic diseases and cancer.

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The final challenge, in order to fully furnish the facility, is to raise $2.5 million to purchase essential laboratory furnishings and clinical equipment.

The Center for Companion Animal Health (CCAH) is dedicated to advancing studies in veterinary medicine, including new ways to prevent, diagnose and treat diseases such as the following in companion animals:

- Cancers
- Genetic and immune disorders
- Infectious diseases
- Kidney and heart diseases
- Nutritional disorders

The CCAH also supports programs in the following areas:

- Orthopedics
- Shelter medicine
- Behavior


For more information about how you can help to furnish the CCAH, contact the Office of the Dean—Development, (530) 752-7024 or visit the Web site (www.vetmed.ucdavis.edu/gifts).

On the second floor, both large laboratories—one dedicated to oncology and the other (shown below) to genetics—are already “moved in” and engaged in health studies.

Dr. Leslie Lyons’ research team has identified the exact inherited gene mutation that causes polycystic kidney disease (PKD), which affects approximately six percent of the cat population worldwide. Investigation of the causes of retinal degeneration in Persian cats, and therapies for canine lymphoma and melanoma are other examples of the many studies underway at the CCAH.

In the new CCAH Physical Therapy Unit, two AquaPaws hydrotherapy treadmills will be used to aid rehabilitation.

Dr. Alan Theon, service chief (left), and Dr. Michael Kent of the VMTH Radiation Oncology Service provide therapy for cancer patients.

The new CCAH is working to raise $250,000 for an upgraded linear accelerator in order to be able to offer intensity modulated radiation therapy (IMRT) to companion animals.

IMRT, which vastly improves cure rates, is the state-of-the-art treatment for human cancer patients.

Construction of the $16.4 million new Center for Companion Animal Health (CCAH) building is complete. No state or federal funds were used to build the facility, which includes a cancer clinic, physical therapy unit, and laboratories for the study of genetic diseases and cancer.
Center for Continuing Professional Education
2004 Calendar

Programs for DVMs
First Annual Veterinary Neurology Symposium June 27, 2004 UC Davis

Adventure Series—Australia July 31–August 16, 2004 Australia

Bronchoscopy and Flexible Endoscopy Course and Wet Lab Aug 28–29, 2004 or Sep 18–19, 2004 UC Davis

17th Annual Fall Symposium on Recent Advances in Clinical Veterinary Medicine September 12, 2004 UC Irvine

20th Annual George H. Muller Veterinary Dermatology Seminar in Hawaii November 3–10, 2004 Maui, Hawaii

Sixth Annual Veterinary Endocrinology & Internal Medicine Seminar November 30–December 7, 2004 St. Martin, Caribbean

Programs for RVTs, Veterinary Technicians and Veterinary Assistants

Technician/Assistant Dental Radiograph Techniques for Dogs and Cats May 16, 2004 UC Davis

Technician/Assistant Surgical Assistance May 23, 2004 UC Davis

Technician/Assistant Diagnostic Parasitology June 27, 2004 UC Davis

Endoscopy for the Veterinary Technician: Workshop and Wet Lab Aug 28–29, 2004 or Sep 18–19, 2004 UC Davis

For more information: For DVM programs, contact Saundra Wais, sjwais@ucdavis.edu, phone (530) 752–3905, fax (530) 752–7563; for RVT programs, contact Tomás Lozano, tdlozano@ucdavis.edu, phone (530) 752-3819, fax (530) 752–7563; or visit the CE Web site (www.vetmed.ucdavis.edu/ce).

www.vetmed.ucdavis.edu/ce

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