

READY TO BEGIN

Commencement 2012

Officially ready to enter the profession, 129 graduates received their Doctor of Veterinary Medicine degrees June 15, 2012 from the School of Veterinary Medicine. Also at commencement the school recognized 15 candidates for the Master of Preventive Veterinary Medicine degree and 37 veterinarians who completed their residency training.

Casey Kohen and Jacqueline Tanner each received School of Veterinary Medicine Medals for outstanding academic and clinical performance throughout the four-year program.

Student speakers Casey Kohen and Alyse Zacuto shared memories and hopes with their classmates, while the student-selected faculty speaker, Richard LeCouteur, offered words of advice and humor.

Chancellor Linda P. B. Katehi conferred the degrees, and H. Jay Kerr, DVM 1977 and president of the California Veterinary Medical Association, led the graduates as they took the veterinary oath for the first time.

At the ceremony, the school also acknowledged five Alumni Achievement Award recipients (see related story, page 2) and thanked retiring faculty members Tim E. Carpenter, Ian Gardner, Peter J. Ihrke, Mark D. Kittleson, Donald J. Klingborg and Linda Lowenstine for their years of dedication to academic veterinary medicine.



Yenlie Wang Zingale receives her doctoral hood from Chair of the Faculty Alan Conley at the School of Veterinary Medicine commencement ceremony June 15.

A Room with a View

Lynelle Johnson is performing a bronchoscopy on "Brinkley," a Golden Retriever. In the Small Animal Clinic, few people are more experienced with the procedure than Johnson, an associate professor who specializes in respiratory

diseases of pets. "About 75% of my patients require either rhinoscopy or bronchoscopy," she states. These procedures involve placement of a lighted camera into the nose or lungs to document disease processes.

She guides the scope slowly past the animal's mouth and trachea to examine all the airways. The camera on the tip of the lighted wand shows images on a monitor overhead. "It is always important to search out possible foreign bodies," she tells the students who have gathered to observe and learn.

The Small Animal Internal Medicine Service embraces endoscopic techniques because they are so effective and less

invasive than exploratory surgery. The instruments, sized and shaped for specific animal types and body systems, may also aid in removing foreign objects from the nose, lungs, or stomach, or in performing laser lithotripsy for stones in the urinary tract. Valerie Walker, RVT, and a half dozen other veterinary technicians keep the many scopes in optimal condition and assist with procedures.

Indications for a bronchoscopy include chronic cough—Brinkley's current complaint—relapsing pneumonia, airway foreign bodies and airway collapse. Each patient receives screening for anesthesia issues, bleeding tendencies and other considerations.

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Strategic Plan Sets Sail

The implementation phase of the school's strategic plan was launched in spring 2012. A new, crisp mission statement, "To advance the health of animals, people and the environment," is accompanied with a defined vision of "Leading Veterinary Medicine, Addressing Societal Needs."

Seven goals are clear:

- Educate world leaders in academic veterinary medicine, veterinary medical practice, public and environmental health
- Be at the forefront of high-impact, transdisciplinary research
- Provide cutting-edge clinical programs that support education, research and service
- Advance the well-being of animals and people in California and around the globe
- Ensure effective school-wide management infrastructure and sustainable financial resources
- Recruit, retain and cultivate excellent and productive faculty and staff
- Build strong collaborations across UC Davis and with other academic, government, agricultural and business partners

Associated strategies have been identified to help the school reach its goals. For example, with the goal of educating world leaders, faculty have been charged to attract, mentor and support the best and brightest students and trainees; design curriculum and training programs to meet current and future societal needs; and share educational expertise and best practices locally, nationally and internationally. Dean Michael Lairmore has identified 38 faculty and staff as "strategy champions" who will act as catalysts in the development and implementation of the 19 strategies and associated tactics to support the goals.

The plan is a living document to be reviewed and updated throughout the next five years as actions are taken, projects are completed and new ideas are developed to advance the overarching goals.

To view the full strategic plan, please visit the school's website, www.vetmed.ucdavis.edu/strategic_planning/index.cfm.



Alumni Achievement: The Full Spectrum of Veterinary Practice

Congratulations to the 2012 Alumni Achievement Award honorees, outstanding graduates who have made personal and professional contributions to veterinary science or veterinary practice, or in service to humankind and the advancement of human welfare.

Eric Davis, MS 1972, DVM 1977, Residency 1987-1989, veterinarian, International Animal Welfare Training Institute and director, Rural Veterinary Experience, Teaching and Service, was recognized for his contributions and leadership in animal welfare and veterinary student training in rural veterinary services.

Charles Issel, DVM 1969, Wright-Markey Chair of Equine Infectious Diseases, University of Kentucky, was honored for his extraordinary research accomplishments and leadership in equine virology.

Richard Nelson, Residency 1980-1982, Professor, Small Animal Medicine and Associate Director, William R. Pritchard Veterinary Medical Teaching Hospital, was acknowledged for his distinguished scholarship in veterinary endocrinology and for innovation in veterinary education.

Charles Plopper, PhD 1972, Professor Emeritus, UC Davis School of Veterinary Medicine, was recognized for his exceptional leadership and accomplishment in research, graduate education and administration in the school.

Shaohua Zhao, MPVM 1988, PhD 1991, Team Leader, US Food and Drug Administration, Center for Veterinary Medicine, Maryland, was honored for her outstanding contributions to protecting public health through food safety research, surveillance, training and education.

Discovery Paves Way for Salmonella Vaccine

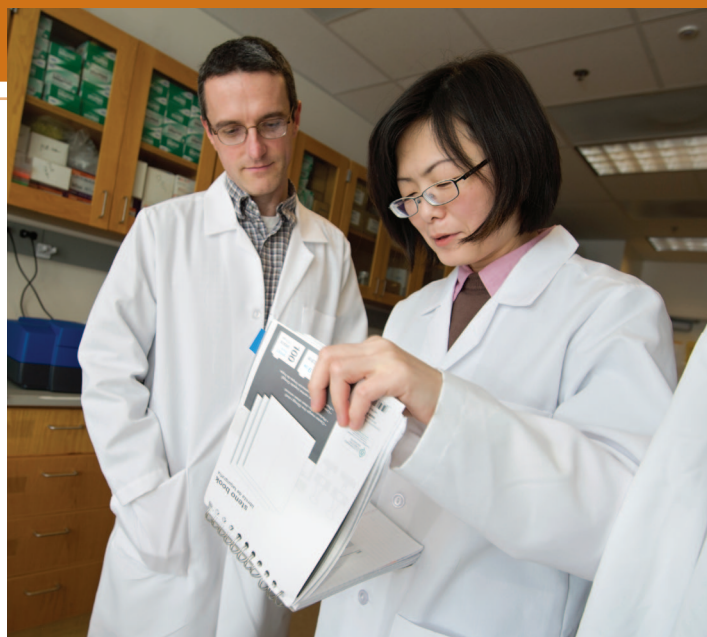
An international research team led by immunologist Stephen McSorley, Department of Anatomy, Physiology & Cell Biology, has taken an important step toward an effective vaccine against salmonella, a group of foodborne bacteria that kills hundreds of thousands of people worldwide each year.

There are no vaccines for the strains of salmonella that cause these foodborne illnesses. Furthermore, salmonella bacteria increasingly are becoming resistant to existing antibiotic treatments. No new, effective antibiotics are on the horizon.

The scientists created an array of 2,700 proteins representing about 60 percent of all proteins produced by salmonella bacteria. The researchers found that 117 of those proteins behaved as antigens when mixed with blood serum from salmonella-infected mice—that is, they triggered an immune response to defend against the infection.

The researchers also identified 14 proteins that served as antigens in the blood serum from Malawian children infected with salmonella. Eight of those 14 proteins were among the 117 antigens identified in the mice.

“Discovery of the eight antigens in both mouse and human infections suggests that some of these antigens might be successfully used in developing a salmonella vaccine and that the



Stephen McSorley, left, reviews data with postdoctoral fellow Seung-Joo Lee, the vaccine paper's first author.

mouse model of salmonella will be useful before vaccine research moves into clinical trials,” said McSorley, senior author.

Study collaborators included UC Irvine; the University of Malawi; Novartis Vaccines Institute for Global Health; and the University of Birmingham, England. The National Institutes of Health, the Wellcome Trust, and GlaxoSmithKline provided study funding.

Outstanding Students Honored at Scholarship Awards Ceremony

Student Charlene Noll receives congratulations from Dean Michael Lairmore as well as benefactors Roy and Jo-Ann Kusumoto, at the school's scholarship awards ceremony on May 15. The Kusumotos represented faculty members Karl Jandrey and Michael Kent in awarding Noll with the Caesar, Lucy and Gabbie Endowed Scholarship, established in 2006. The award goes to a second or third-year student who plans to become board certified in one of the clinical specialties and pursue an academic career.

This year's scholarship program awarded \$1.8 million with 680 scholarships, including 18 new awards. The scholarship and grant programs provide a combined total of \$3.7 million to defray rising educational costs. More than 90 percent of the school's students receive scholarship or grant funding. Many of the awards were established to pay tribute to family members and cherished pets. The generous support of individual, student club, graduating class, veterinary association, breed club and corporate scholarship donors make it possible to recognize veterinary students for outstanding achievements. These funds also make it possible for students to gain research experience, explore new opportunities in the veterinary profession and to learn through externships.





Milestone Reached in Treating Brain Tumors

The school has reached a major milestone in treating patients with brain tumors. Since 2009, 100 companion animals have undergone treatment through the Comparative Cancer Center using stereotactic radiosurgery, a noninvasive procedure delivering higher doses of precisely targeted radiation therapy to specific tumor sites. Its accuracy helps to spare normal tissue as much as possible. “Usually done on an outpatient basis, the procedure reduces treatment time and avoids multiple applications of anesthesia. It also allows us to treat tumors in dogs and cats that cannot be treated using surgery due to their location or extent—a wonderful advantage of this treatment,” says radiation oncologist Michael Kent. UC Davis is one of only a few centers in the world able to offer this procedure to patients.

A Room with a View

Continued from page 1

Johnson first diagnosed Brinkley with an *E. coli* lung infection after performing a bronchoscopy in late 2011. Now Brinkley is back. While moving the scope through branches of the lungs, Johnson notes areas where his tissues are dilated, narrowed or irritated and stops the overhead monitor’s camera to point out to her students, “The right middle lung lobe is a prime site for aspiration.” She also identifies some scarring in the lungs. “This suggests a chronic process,” she explains. Johnson and Walker push fluid into the lungs and suction out samples for testing, a process known as lavage.

After this exam, while Brinkley remains unconscious, Catherine Outerbridge, an assistant professor in the Dermatology Service, steps in to consult on a skin infection on Brinkley’s neck and a change to his flea medication to avoid interference with other medications.

“Patients often come here with multiple problems,” Johnson remarks. She frequently coordinates patient care with other clinicians in the hospital, adding, “We offer specialized instruments not available in other specialty clinics. Once a patient arrives here, we can offer every kind of expertise under one roof.”

Johnson’s clinical cases have influenced her research, she says. “I am interested in evaluating diagnostic techniques. If I can describe the diseases more clearly using a technique available to me, it is my hope that it will make diagnosis, and ultimately treatment, easier for others.”



After performing a bronchoscopy on her patient, internal medicine specialist Lynelle Johnson teaches Tiffany Sung, class of 2015, how to take a sample from a swollen lymph node. The service manages many patients with multiple health issues.

One week later, Johnson is down in the barn, helping the large animal clinicians perform rhinoscopy on a pot-bellied pig with a nasal infection.

WELCOME

New Director of Extension Program

E. Robert “Rob” Atwill, DVM 1990, MPVM 1991, PhD (Cornell 1994), was appointed director of Veterinary Medicine Extension May 1, 2012.

As director, he participates and provides leadership on the Agriculture and Natural Resources (ANR) Program Council. Atwill strives to provide insightful, pragmatic solutions to some of the human, agricultural, and natural resource challenges facing California and the nation.

A faculty member in the Department of Population Health and Reproduction since 1994 and a specialist in Veterinary Medicine Extension, he continues his duties as director of the Western Institute for Food Safety and Security.



E. Robert “Rob” Atwill

Building the Development Team

Frank Teplin joined the development team on May 21, 2012 as a director of development. His focus is identifying, cultivating and soliciting individual and corporate donors.

A seasoned fundraiser, Teplin served as the associate director of development in the Division of Arts and Humanities at UC San Diego. He has also worked in development and communications at several noted arts organizations, including La Jolla Playhouse, the San Diego Symphony and the Old Globe Theatre.

Teplin received his Bachelor of Arts degree from UC San Diego, with a major in theatre and a minor in mathematics.



Frank Teplin

New Administrator is Ag Economist

To ensure effective school-wide management infrastructure and sustainable financial resources for the future, the school has hired Mary McNally as executive assistant dean for administration. Her appointment became effective June 28, 2012.

As the chief financial officer, McNally is responsible for administrative resources and assets, and she oversees administrative infrastructure.

McNally brings to the school experience from her previous position as assistant dean of business and finance at the Graduate School of Management, where she worked since 2007.

McNally holds an MS and PhD from UC Davis in agricultural economics, specializing in quantitative methods, international economics, and natural resources and environmental economics.

McNally replaces Doreen Franke, who retired after 11 years as the chief financial officer.



Mary McNally



Vet Med Transformation

Shown here in May 2012, members of the Dean’s Advisory Council were among the first to tour the Veterinary Medicine III B building. Construction of the research facility has run ahead of schedule, with completion set for December 2012. Architects and administrators have decided to pursue “platinum” LEED status for the facility, a certification of environmentally friendly features. Completion of this building will mark the transformation of the health sciences complex into a modern veterinary campus; the facility will house faculty and programs in basic and clinical sciences.

Memorial Giving Offers Compassion and Hope

Helping to bring comfort to those who have lost a beloved animal, the school has partnered with veterinary clinics through the Companion Animal Memorial Fund and the Equine Memorial Fund.

The memorial program offers veterinarians a meaningful way to express compassion and sympathy to their grieving clients by making donations in tribute to cherished pets. Donations make a difference advancing animal health by supporting research conducted at the Center for Companion Animal Health and the Center for Equine Health.

“The CCAH has achieved amazing advances in improving the quality and quantity of life for our dear furred and feathered friends, and the least I can do is honor my patients who have died with a gift that will contribute to the important work being done by the CCAH,” says Debra Scheenstra, who has been honoring patients through the memorial program since 2001.

Giving loyally to the program since 1996, veterinarian Jerry Huff says, “The goodwill generated by those donations coupled with the satisfaction of knowing the money substantially benefits equine disease research far outweighs the investment.”

The program has inspired long-time giving. Nearly 150 veterinary clinics have been giving for 10 consecutive years or

more. The number of participating clinics is growing. Last year, 350 clinics contributed more than \$260,000 to support research to better identify, diagnose, treat and prevent animal diseases and conditions.

“We are grateful to the hundreds of veterinary clinics for their support of the Companion Animal Memorial Fund. The program offers veterinary practices a special way to honor patients, brings comfort to owners who have lost a pet, and is critical for studies done by our faculty and residents that are improving the health of small companion animals,” says Niels Pedersen, director of the CCAH. “I have never worked with a program that has done so much good and has been so personally rewarding.”

“Over the last decade, donations to the CEH by veterinarians through this fund have supported significant research in equine health care,” says Gregory Ferraro, director of the CEH. “In this program, everyone benefits; the veterinary practitioner can express his or her condolences to the horse owner in a positive way, the grieving owner is comforted, and the horses we love so much are protected through increased medical knowledge.”

For more information on the memorial funds, please contact the Development Office at (530) 752-7024.

2012 El Blanco Award

For contributions and dedication to eliminating hyperuricosuria in the Dalmatian breed, the school has honored dog breeder Denise Powell of Hayward with the 2012 El Blanco Award.

The El Blanco Award recognizes significant contributions that animal owners and other benefactors have made to clinical veterinary medicine.

Hyperuricosuria occurs when excessive amounts of uric acid are found in the urine; the acid can form “stones” that block the urethra and require surgical removal. Powell provided urine samples, DNA samples, pedigrees, and photos of her dogs—and she found other breeders to provide similar materials. With this information, Danika Bannasch, professor of genetics, was able to identify the gene and causative mutation for excretion of high levels of urate in Dalmatian urine.

Powell has also emphasized backcrossing to an earlier, healthier type of dog that genetically is more than 99% Dalmatian—but whose offspring are less likely to have hyperuricosuria. Powell and others have worked hard to have these dogs recognized by the American Kennel Club. On November 1, 2011, the AKC granted registration status to Dalmatian dogs that descended from the backcrossed line.

Powell’s commitment also helped the Bannasch lab develop a DNA test that Dalmatian owners and owners of other dog breeds may use to make informed breeding decisions. The test is available at the Veterinary Genetics Laboratory. The DNA research continues as Bannasch identifies other breeds with this problem.



Denise Powell, left, with Danika Bannasch, received the El Blanco Award at the Annual Spring Showcase

Philanthropic Partners Honored for Advancing Animal Health

Donors are visionary leaders who share in the school's commitment to improve the health of animals. Recognizing their important role as valued philanthropic partners, the school honored donors at the Fifth Annual Spring Showcase and Heritage Society for Animals reception held on April 18.

"At the heart of our success are our philanthropic partners. We are sincerely grateful for their generosity."

– Dean Michael Lairmore

Spring Showcase

More than 170 donors to the school attended the Spring Showcase and learned about some of the school's latest initiatives benefiting animals.

Niels Pedersen, director of the CCAH, welcomed guests and introduced faculty who gave informative presentations on their work focused on

improving companion animal health. Leslie Lyons presented highlights of her latest feline genetic research. Melissa Bain provided insight into the importance of behavior in the care of pets. Kate Hurley revealed how veterinary science is breaking new ground in shelter medicine.

"These presentations are just a glimpse of the many exciting things happening at our school. Our dedicated veterinary team loves animals and has a thirst to discover new knowledge to create future therapies and to translate basic discovery into real world solutions," says Dean Michael Lairmore. "At the heart of our success are our philanthropic partners. We are sincerely grateful for their generosity."

Heritage Society for Animals Reception

Dean Lairmore welcomed 23 new members to the Heritage Society for Animals, whose membership has grown to more than 470. The society recognizes individuals who have chosen to express their commitment to animals through planned gifts to the school.

"Today's students are graduating with debt of about \$150,000. If we do not do something about looming student debt, our profession is in danger. So I decided to do what I could to help the students," says Kelly Byam, DVM 1997. "If it wasn't for the unconditional love of my beloved Molly Maia, a 5 lb. miniature dachshund, I wouldn't have had the



Dean Lairmore welcomes new member Kelly Byam to the Heritage Society for Animals at the 2012 annual reception.

courage to apply to veterinary school. Two years ago I chose to memorialize her with a scholarship. This year, we decided to make it permanent with an estate gift. Molly Maia died in 1999, but will forever live in my heart. She received dental surgery, a hemi-laminectomy, and treatment for pancreatitis at the VMTH. Seeing her name on the memorial at the hospital brought tears to my eyes—tears of both grief and gratitude for her gift that lives on in me and even after I die."

Philanthropic support at the school is essential for cutting-edge research to find cures for diseases, provide scholarships for veterinary students and graduate students, construct and renovate facilities, and endow chairs and professorships.

K. Gary Magdesian gave a brief overview of his work in large animal emergency and critical care of foals. He is the first to hold the Roberta A. and Carla Henry Endowed Chair in Emergency Medicine and Critical Care. The endowment recognizes two sisters who were dedicated animal lovers.

"Their legacy will help us continue to improve the care of veterinary patients and advance the state of clinical practice for our beloved companion animals," says Magdesian.

For more information about joining the Heritage Society for Animals or planning for an estate gift, contact the Development Office at (530) 752-7024.

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CE Calendar

Veterinary Continuing Education

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center4cpe@ucdavis.edu

October 7, 2012

VMTH Veterinary Practitioners Seminar

October 28, 2012

UC Davis VMTH/San Francisco SPCA
Fall Veterinary Symposium, San Francisco

For information on these and other 2012 events, including student-hosted symposia, please visit www.vetmed.ucdavis.edu/ce.



You're Invited: Alumni Reunion Weekend

October 5-6, 2012, the School of Veterinary Medicine welcomes the reunion classes of 1952, 1962, 1972, 1982, 1987, 1992, and 2002 back to campus to reconnect, celebrate old times, and create new memories. It will be a fun weekend, so make your plans and come to Davis! For more information, call (530) 752-7024 or visit www.vetmed.ucdavis.edu/alumni/reunions/index.cfm

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