

HEARTBE

July/August 2016

State of MTH 2015-2016

From the Director's Office

Welcome to our annual State of the VMTH issue. We devote this entire issue to bringing you highlights of activities and accomplishments in the many services that comprise the UC Davis veterinary hospital. These accomplishments showcase the dedication and breadth of talent of our faculty, staff, house officers and students, who combine forces every day to provide top-notch patient care and client service in one of the most advanced and busiest veterinary teaching hospitals in the world.

Once again, our overall caseload continued to be one of the highest of any veterinary hospital in the country, as we facilitated more than 50,000 patient visits for the year. This overall caseload is a testament to the hard work and commitment of our clinicians, staff and students. The many faces that make up the hospital continue to be here 24 hours a day, 365 days a year to care for our community's animals. From our dedicated client services staff who tirelessly facilitate every one of those visits to our highly skilled veterinary assistants and technicians who care for animals around the clock, UC Davis veterinarians are supported by an amazing team that keeps the hospital functioning at an extraordinary level.

As a teaching hospital, one of our primary missions is to educate current and future veterinarians to be successful and become leaders in their chosen fields. Our house officer program, the largest of any veterinary hospital, trained 109 residents, interns and fellows in 34 specialty disciplines during the past year. The 137 students in the DVM Class of 2016 spent their fourth and final year of veterinary school on a 59-week clinical rotation through the hospital's many services, getting hands-on training from some of the top veterinary professionals in their respective fields. Additionally, more than 120 board-certified faculty and staff veterinarians, as well as nearly 350 highly-trained staff members rounded out the make-up of the hospital. In total, that's more than 700 people dedicated to advancing the health of animals!

As I begin my tenure as chief veterinary medical officer, I am thrilled to support our team of talented and caring clinicians, staff, and students to bring cutting-edge veterinary care to animal owners throughout California and beyond. As our new Veterinary Medical Center becomes a reality in the coming years, I have no doubt that our accomplishments will continue to escalate and we will achieve even higher levels of patient care, clinical discovery, and education of future veterinarians and veterinary specialists. It is an exciting time for our hospital and the School of Veterinary Medicine as a whole. Here's to an even more exciting 2016-17 academic year.

Regards,

Jane Sykes, BVSc (Hons), PhD, DACVIM Chief Veterinary Medical Officer, William R. Pritchard VMTH



Behavior

- Dr. Melissa Bain received the Bustad Companion Animal Veterinarian of the Year Award from the American Veterinary Medical Association.
- Dr. Liz Stelow published her research on the relationship between coat color and aggressive behavior in cats, which was covered extensively in the media throughout the world.
- Drs. Melissa Bain and Liz Stelow served on committees of the American College of Veterinary Behaviorists.
- The service continued to offer one of the few behavior residency training programs in the country—a position currently filled by Dr. Karen van Haaften.
- Hosted a week-long Food Animal Behavior and Welfare short course for American College of Veterinary Behaviorists residents across the county, in conjunction with clinicians from the hospital's livestock services.
- Continued to maintain high quality care and support for a large number of patients with problem behaviors, including aggression, anxiety, house soiling, and repetitive behaviors. Additionally, house calls were offered for feline patients in the local area.
- Continued to co-host the weekly puppy socialization class, Yappy Hour, in collaboration with the Community Practice Service.

Anatomic Pathology

- Established a "Dermatopathology & Dermatology Consulting" option for referring veterinarians to submit biopsies for second opinions or further diagnosis.
- Nearing implementation of a specialty renal pathology service.
- Residents presented research projects at the annual American College of Veterinary Pathologists meeting.
- Several new staff members joined the histology laboratory team.

Dentistry and Oral Surgery

- The mandibular reconstruction program continued to help dogs with bilateral rostral mandibulectomy, segmental mandibulectomy and defect non-union. Patients from as far away as Maine traveled to the hospital seeking mandibular reconstruction, a cutting-edge procedure pioneered by, and currently only offered at, UC Davis. To date, three landmark publications resulted from this unique program.
- The ground-breaking research on the use of mesenchymal stem cells for the treatment of chronic stomatitis in cats is continuing and has resulted in one patent and two publications. The current clinical trials were expanded to a two-center trial with Cornell University, and efforts are also being made to bring this therapy to a human clinical trial.

- Collaboration with the Biomedical Engineering Department continued, and the use of 3D printing of skulls for the treatment planning of challenging maxillofacial cases became an integral part of the service.
- Excellent progress was made with the use of cone-beam computed tomography in diagnostic imaging of dental, maxillofacial and temporomandibular joint disorders in dogs, cats and rabbits with four manuscripts submitted for publication.
- Four full-length publications based on hospital clinical case material were published in top-tier journals and covered topics in oral pathology, oral surgery and oral diagnostic imaging.
- Collaborative research continued with the California Academy of Sciences and the Museum of Vertebrate Zoology at UC Berkeley, and a new relationship was forged with the Museum of the North at the University of Alaska – Fairbanks, resulting in three publications over the past year, documenting the oral pathology of the bobcat, walrus and polar bear. The results of this fundamental research program, unique to UC Davis, has now resulted in documenting the oral pathology of all major marine mammal species and is now moving on to the large carnivores occurring in California.
- The service offers a research internship for pre-dental undergraduates. To date, all students who completed the internship were admitted to dental school, and two have gone on to do a residency to become oral surgeons.

Anesthesia/Critical Patient Care

- Anesthetized more than 4,000 small animal and 650 large animal patients.
- Increased the use of ultrasound guidance for regional anesthesia.
- Supported the development of state-of-the art techniques by other services by providing special anesthetic techniques.
- Provided new clinically relevant information, including examples on anesthetic and analgesic drug pharmacology, local anesthesia for dental procedures, and rabbit anesthesia.
- Welcomed Dr. Amandeep Chohan as the newest faculty member of the service.

Clinical Pathology and Laboratory Services

- After two years of promoting equine protozoal myeloencephalitis (EPM) testing—including at the 2014 and 2015 American Association of Equine Practitioners Conventions—submissions increased 15 percent for EPM Panel testing (SarcoFluor[™] and NeoFluor[™]) during fiscal year 2015-2016. This represents a second year of record growth for EPM testing. Developments are underway to soon offer new ratio results for EPM sample submissions that include both serum and cerebrospinal fluid.
- Research in the Clinical Diagnostic Laboratories: 121 open and ongoing studies (52 of those are new studies from this year), representing a 37.5 percent increase in number of registered studies compared to last year, and is a record number of open and ongoing studies. The Clinical Diagnostic Laboratories accept veterinary research specimen submissions from both UC Davis and non-UC Davis researchers.
- Laboratory FedEx Reduced Price Shipping program—created to assist referring veterinarians submitting specimens to the

laboratories—has seen an 88 percent increase in the number of packages submitted through the program. Client feedback has been overwhelmingly positive and the program enrolls new veterinarians daily.

- Clinical Pathology hosted visiting veterinarians from Egypt, Germany, Greece, Serbia, Taiwan and the United Kingdom.
- Clinical Pathology obtained a new 10-head multi-headed microscope to assist in education. A faculty member can "drive" the scope and show nine students/residents/other faculty what they are seeing on each slide, providing real-time education. This replaces a 6-head scope from previous years.
- Dr. Diana Schwartz, a Clinical Pathology resident, completed an externship at the San Diego Zoo.
- The Transfusion Medicine Service hosted two veterinary students and one faculty member (UC Davis alum Dr. Yi-Lun Tsai) from Taiwan's National Pingtung University of Science and Technology veterinary school, training them on the procedures and protocols for blood banking and blood donation. They have since opened their own blood bank and community-based canine blood donor program, modeled after UC Davis. It is a first of its kind in Taiwan.

Equine Medicine (Field Service; Medical Emergency, Critical Care and Neonatology; Internal Medicine)

- Field Service acquired a new diagnostic ultrasound machine thanks to a generous donation from the T.S. Glide Foundation.
- Caseload of foals saw an increase from the previous year, thanks to the dedicated team in the neonatal intensive care unit.
- Field Service facilitated more than 2,500 patient visits to local ranches and farms, providing scheduled and emergency on-site care for horses and primary care learning opportunities to senior veterinary students and residents.
- Residents presented research projects at the annual American College of Veterinary Internal Medicine meeting and the American Association of Equine Practitioners Convention.
- Field Service's Janette Barrango received the Rachel Smith VMTH Employee of the Year Award. Janette has been an important part of the Client Services team for many years, and her impact on our students and clients was immeasurable and invaluable. She is retiring this year after 38 years with the hospital.
- Dr. Emily Berryhill joined the Field Service team on a permanent basis, after many years of serving the hospital as a fellow in Equine Medicine and Field Services in 2012 and a resident in Large Animal Internal Medicine from 2013-16.
- Specialty areas of the service continue to grow, including neurology, neonatology, ophthalmology, oncology and dentistry.

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Equine Reproduction

- Using intracytoplasmic sperm injection (ICSI), reproduction specialists were successful in assisting with the first foal ever born at UC Davis by in-vitro fertilization. Unlike the normal process of in-vitro fertilization (which generally doesn't work with horses), the ICSI process involves injecting a single sperm into an egg extracted from a mare. The embryo then develops in a lab for a week before being implanted in the mare. Few facilities in the country have the capability to perform ICSI fertilizations, so UC Davis worked in collaboration with the Equine Embryo Laboratory at Texas A&M University.
- The service assisted more than 400 clients with their equine reproductive needs, which included medical/obstetrics services as well as advanced reproductive techniques.

Communications and Marketing

- Clues about veterinary medicine—filmed at UC Davis appeared on three episodes of the nationally-televised game show "Jeopardy."
- Increased Facebook followers by 102 percent and Twitter followers by 24 percent to maintain both as the largestfollowed social media sites of any veterinary college.
- Launched an Instagram page and quickly gained more than 6,000 followers in the first six months.
- Successfully promoted the hospital at American Association of Equine Practitioners Convention, Western States Horse Expo, and Pacific Veterinary Conference, as well as many local community events.
- Garnered coverage for hospital in New York Times, Los Angeles Times, Wall Street Journal, National Geographic, ESPN Radio, ABC News, NBC News, CBS News, FOX News, Huffington Post, National Public Radio, Veterinary Practice News, DVM360, as well as many appearances on Sacramento and Bay Area TV newscasts.



Livestock Medicine and Surgery

- Third-year resident Dr. Christie Balcomb won the Large Animal Award at the Gerald V. Ling House Officer Seminar Day and the Food Animal Abstract Award at the annual American College of Veterinary Internal Medicine forum for her resident research project investigating the efficacy and pharmacokinetics of the gastro-protectant famotidine in adult cattle.
- Dr. Munashe Chigerwe won the "Favorite Clinician" teaching award from the Class of 2016 for the second year in a row.
- Drs. Meera Heller and Christie Balcomb presented research and represented UC Davis at the World Buiatrics Congress in Ireland.
- Former resident Dr. Joe Smith became board certified in the American College of Veterinary Internal Medicine.
- The service acquired a new squeeze chute for working cattle.
- The service worked with Dr. Temple Grandin, a world-renowned expert in cattle handling, to develop a plan for a cattle handling system in the future Veterinary Medical Center.

Cardiology

- Dr. Catherine Gunther-Harrington joined the cardiology team as a staff veterinarian after the successful completion of her residency. This results in additional appointment availability for the growing service.
- Established the Clinical Cardiology Laboratory under the direction of Dr. Lance Visser. This new space provides additional equipment and resources to complete cutting-edge clinical trial research, an area where the cardiology team is heavily involved. The addition of this laboratory makes UC Davis one of only a handful of locations with both a molecular and clinical cardiology research space that bring cutting-edge medical information to clinical patients before it is even published.
- Established a feline compassionate care fund through generation client-directed donations that provide financial aid for feline patients with cardiac disease, as well as other illness.
- Expanded the service's technical support staff with the addition of Jennifer Whitten. The addition of another cardiology technician provides patients with more efficient and personalized service each time they visit the hospital.
- A redesign and relocation of the cardiology student and resident rounds space will be completed in the coming months. This new space provides clinical teaching areas to review patient diagnostics and teach cardiology to fourth-year DVM students.

Nutrition

Resident Dr. Aarti Kathrani received second place in the American Academy of Veterinary Nutrition's case report contest, and accepted a faculty position at University of Bristol (UK) School of Veterinary Sciences.

- Dr. Jennifer Larsen served as chair of the training program committee for the American College of Veterinary Nutrition. Dr. Andrea Fascetti served as a member-at-large on the executive board of the American College of Veterinary Nutrition.
- Dr. Andrea Fascetti was the recipient of the 2016 American Veterinary Medical Foundation/Winn Feline Foundation Excellence in Research Award.
- Drs. Jennifer Larsen and Andrea Fascetti were invited speakers at numerous local, national and international conferences.
- Dr. Jennifer Larsen is participating in a study, through the UC Davis Veterinary Center for Clinical Trials, evaluating the efficacy of nutrition to manage canine struvite urolithiasis.
- Resident Dr. Aarti Kathrani passed her board certification examination and is now double boarded in both small animal internal medicine and nutrition.

Community Practice (Community Medicine and Community Surgery)

- Served as the primary platform for providing hands-on clinical training to fourth-year DVM students to gain practical experience in a general practitioner setting.
- Continued to co-host the weekly puppy socialization class, Yappy Hour, in collaboration with the Behavior Service.
- Provided opportunities for fourth-year DVM students to gain a greater degree of hands-on surgical experience during their clinical rotations in the hospital, training students on surgical procedures such as limb amputations, urinary bladder stone removals, eye removals, spays and neuters, and small mass removals.

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Equine Surgery and Lameness (Integrative Sports Medicine; Surgical Emergency and Critical Care)

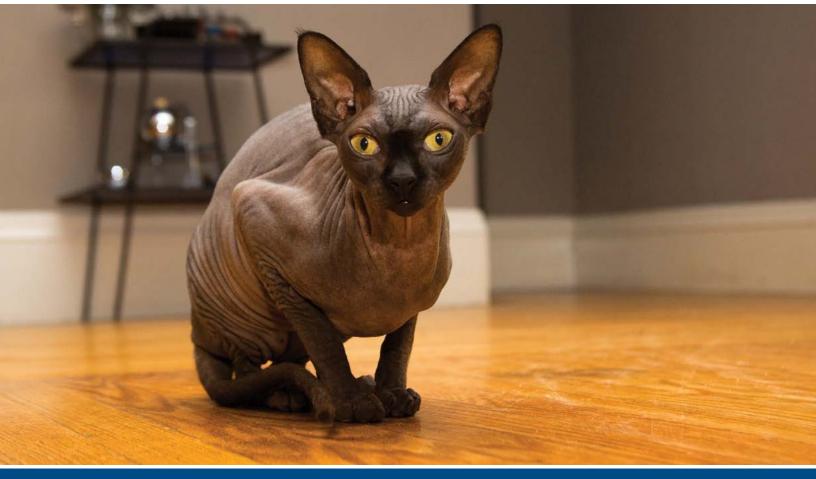
- The Equine Surgical Emergency and Critical Care Service facilitated more than 600 equine emergencies through its 24/7/365 operations.
- Dr. Julie Dechant received the Faculty Distinguished Teaching Award for sustained contributions in large animal curriculum development, and highly effective outreach and continuing education, especially to South American camelid owners and veterinarians.
- Dr. Sarah le Jeune achieved new certification and expertise in Equitaping, and was again the official veterinarian for the Pacific Sporthorse Selection.
- Dr. Isabelle Kilcoyne joined the Equine Surgical Emergency and Critical Care Service as a clinical faculty member.
- Drs. Jorge Nieto and Julie Dechant worked with Dr. Bill Culp to successfully implant the first urethral stent for the treatment of a urethral stricture in a stallion.
- Dr. Sarah le Jeune was an invited speaker at the Northeast Association of Equine Practitioners Conference, the Florida Association of Equine Practitioners Conference, the New Zealand Equine Research Foundation Symposium, and the American Endurance Racing Convention.
- Dr. Julie Dechant organized and hosted the 11th Annual UC Davis Camelid Symposium.
- The Equine Surgery and Lameness Service is instituting new clinical trials for stem cell therapy for laminitis, tendon, and ligament injuries and joint disease.

Small Animal Orthopedic Surgery

- Welcomed Dr. Po Yen Chou, a board-certified surgeon in the American College of Veterinary Surgeons.
- Dr. Amy Kapatkin continues to serve as chairmen of AOVET Education Commission and editor in chief of the AOVET Small Animal Surgical Reference, and represents the American College of Veterinary Surgeons on the American Board of Veterinary Specialists.
- Dr. Duane Robinson continues to serve on the editorial review board for the Veterinary Surgery journal and on the continuing education committee for the American College of Veterinary Surgeons. He is also the principal investigator for a multi-center osteoarthritis trial in dogs, making UC Davis the only center in the western United States.
- The orthopedic fracture program, which allows surgical residents to operate complex fractures, continues to be successful thanks to generous donations from the school, hospital, community, and the passion from the student fracture club, led by Dr. Karen Vernau.

Diagnostic Imaging

- Dr. Derek Cissell joined the service as a faculty member, with a clinical focus on CT, MRI and large animal imaging.
- Third-year resident Dr. Jacqui Tanner won the Outstanding Equine Research Study and Presentation at the 2016 Gerald V. Ling House Officer Seminar Day for her study "Fracture of the Temporal Bone associated with Temporohyoid Osteoarthropathy in the Horse."
- Dr. Mathieu Spriet received a grant from the Grayson Jockey Club Research foundation for a clinical study on Positron Emission Tomography (PET) in the horse. With further support from the Center for Equine Health, the hospital is the first veterinary hospital to offer PET imaging to horses.
- Drs. Allison Zwingenberger and Mathieu Spriet were invited to join the Editorial Board of Veterinary Radiology and Ultrasound.
- Dr. Derek Cissell was an invited speaker at the American College of Veterinary Internal Medicine annual conference for a presentation on MRI of the neurologic system.



Large Animal Ultrasound

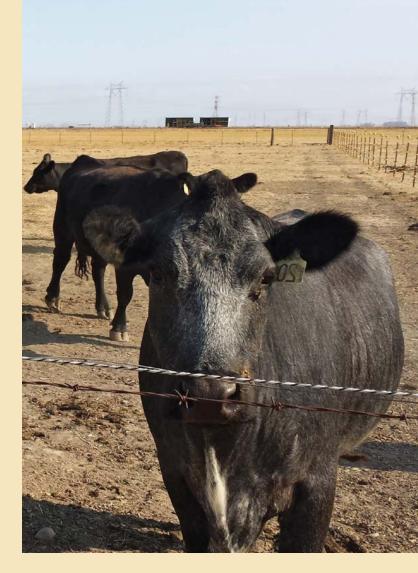
- Dr. Mary Beth Whitcomb spoke at the 2015 British Equine Veterinary Association Congress, and was the 2015 Large Animal Society Keynote Speaker at the American College of Veterinary Radiology.
- Dr. Mary Beth Whitcomb completed the "Superfecta" of speaking engagements, speaking at four of the largest veterinary specialty meetings in 2015-2016 (American Association of Equine Practitioners, American College of Veterinary Surgeons, American College of Veterinary Radiology, and American College of Veterinary Internal Medicine).
- The service was featured on the cover of Veterinary Radiology and Ultrasound twice in 2015-2016. The first publication, "Abnormal imaging findings of the femoral third trochanter in 20 horses," was published in the September/October 2015 edition. The second publication, "Ultrasound-guided injections in horses with cranioventral distention of the coxofemoral joint capsule: feasibility for a cranioventral approach," was published in the March/April 2016 edition.
- Dr. Mary Beth Whitcomb has embraced the challenge of improving challenges for women in equine practice. She organized a session at the 2015 American Association of Equine Practitioners Convention devoted to the subject as section facilitator for the business education committee. She has since given a podcast on the challenges and opportunities for women in equine practice for Equimanagement.

Livestock Herd Health and Reproduction

- Dr. Bret McNabb joined the faculty as an assistant professor of Clinical Livestock Reproduction and Dr. Richard Periera joined the faculty as an assistant professor of Clinical Livestock Herd Health.
- Caseload in advanced reproductive techniques in cattle, sheep and goats has rapidly grown in the spring of 2016.
- The service has taken a greater role in performing entrance heath checks and providing veterinary care for exhibitors at the California State Fair.

Shelter Medicine

- The Million Cat Challenge, a partnership with the University of Florida Maddie's Shelter Medicine Program, continued to expand, surpassing the campaign's five-year goal in only two years. The campaign passed the halfway milestone, marking 500,000 lives saved by the more than 1,000 shelters enrolled in the challenge.
- The Koret Shelter Medicine Program received the Animal Welfare Innovation and Leadership Award from the Canadian Federation of Humane Societies. Just a few years ago, Shelter Medicine shared the Capacity for Care program with Canadian shelters that are now implementing the initiative they credit with, "...revolutionizing the cat overpopulation crisis and saving millions of lives in Canada."
- Dr. Mehnaz (Chumkee) Aziz completed her residency and accepted a position as medical director of the Austin Humane Society.
- Dr. Stacy Kraus joined the team as a clinical instructor for fourth-year DVM students on the shelter medicine rotation. The students will perform more than 1,000 spay and neuter



surgeries under Dr. Kraus' supervision at the Yolo County Animal Services Shelter. In addition, the students will gain experience in surgical procedures, diagnosing and treating medical cases, and explore the differences and similarities between private practice and shelter-based medicine.

Service members met with the Environmental Authority Municipal Veterinary Services in Israel to present shelter medicine and management strategies at the national level, as well as share sheltering best practices with local animal services.

Center for Continuing Professional Education

- The center offered 19 continuing education (CE) programs on campus, off campus and in China and Costa Rica.
- CE programs educated nearly 2,000 veterinarians, RVTs and animal owners from all over the United States, as well as many other countries, covering a wide array of topics for small and large animals, including ultrasound, wildlife, surgical oncology and infectious disease.
- The center now offers online anytime CE courses.
- CE programs continue to receive positive reviews, and many participants attend multiple programs in a year.

Small Animal Emergency and Critical Care

- The service saw a 15 percent increase in caseload, making for a busy year for the clinicians, staff and students who run the 24/7/365 facility.
- The emergency team, led by Dr. Steve Epstein, supervised the care of 40 cats and one dog with injuries following the Valley and Butte wildfires in September. This was an enormous effort involving the coordination of clinicians, staff and students who volunteered their time to care for the severely burned and otherwise injured animals.
- The service continued to provide care to first responder working dogs with the aid of the Faithful Partner Fund, supported by donors. One patient in particular—a local police K-9 officer—received emergency care in the early morning hours for a back fracture after being hit by a car while pursuing a suspect. The combined efforts of the emergency team and hospital neurologists were successful in seeing the K-9 officer walk out of the hospital only nine days later.
- The critical care team provided 24-hour intensive care for many critically ill and injured animals, including dogs and cats with severe trauma, respiratory failure and lifethreatening diseases. The care of these animals is supported by a highly trained team of technicians who work around the clock, under the supervision of the faculty, 365 days a year. The care of animals in the Emergency Room and Intensive Care Unit was further supported this year by the addition of new, state-of-the-art patient monitoring equipment.

Administration

- Dr. Jane Sykes was named Chief Veterinary Medical Officer of the hospital for a five-year term.
- Frank LaBonte retired as Hospital Administrator at the end of June 2016; Joy Hoover was identified as incoming Hospital Administrator starting February 1, 2017.
- Dr. Linda Barter was named Director of House Officer Affairs. Dr. Melissa Bain was named Director of Professional Veterinary Student Clinical Affairs. These two new positions will allow the hospital to expand support for house officer and student training programs. In addition, Diana Gomez retired as House Officer Affairs Coordinator, and Niki Adams was hired into the position.
- Continued progress has been made in planning for the new Veterinary Medical Center, involving many meetings with faculty, campus architects, architectural consultants and designers, and campus leadership.
- Planning for renovations of small animal client services area, new examination rooms for the Companion and Exotic Animal Medicine and Surgery Service and small animal



specialty services, equine surgery resident offices, and cardiology clinical trials laboratory space completed.

- The Interventional Radiology Surgery Suite was completed, a new operating room that adds to the ever-expanding surgical program being pioneered by the Soft Tissue Surgery Service.
- Capital equipment purchases were made for clinical services that totaled \$306,728. Equipment purchased included: emergency patient monitoring system, rapid endotoxin testing system, a portable x-ray unit, endoscopy unit, electrocautery unit, sonoscope portable ultrasound, autoinoculator, among other vital pieces of equipment.
- Extensive re-assessment of the hospital telephony was performed, as well as commencement of the Veterinary Hospital Information System project, which will involve re-programming the existing electronic medical records system in JavaScript. Wi-Fi was installed throughout the hospital for improved communications.
- Facilitated multiple hires of new faculty with clinical appointments, as well as an additional hospital pharmacist, Dr. Lauren Eichstadt.
- Improvements in safety training processes initiated.
- The names and charges for VMTH committees were solidified and new members appointed; oversight of the Graduate Clinical Education Committee was moved from the schoolwide faculty Executive Committee to the VMTH.
- Organized several events, including House Officer Orientation, First-Year Resident Retreat, House Officer Certificate Ceremony, Staff Awards Ceremony, and holiday meals for staff and students who worked in the hospital over the winter holidays.

Integrative Medicine

- Assisted nearly 4,000 patients with complementary medical procedures such as acupuncture, physical rehabilitation, pain management and palliative care.
- The service's caseload grew by 10 percent and remains one of the most popular outpatient services at the hospital.

Ophthalmology

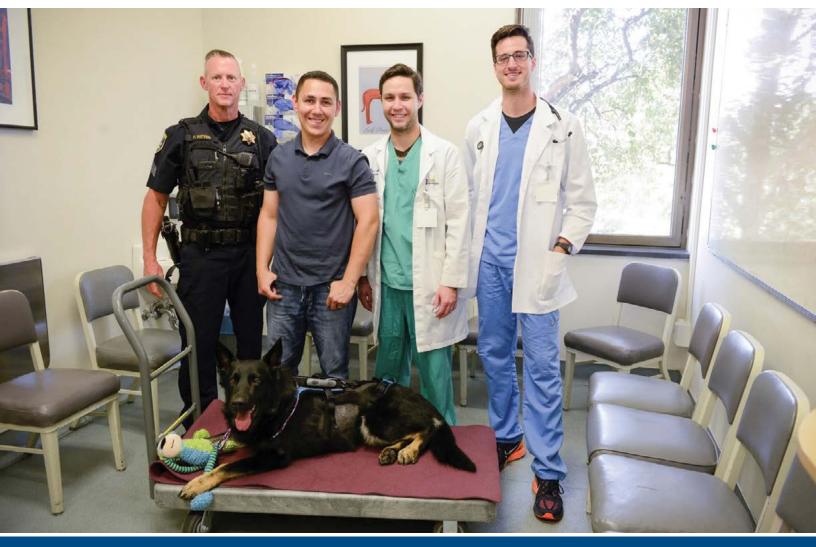
- Fourth-year resident Dr. Lionel Sebbag received the American Association of Veterinary Clinicians Resident Achievement Award presented annually to the individual who is judged to be the most accomplished resident in North America.
- The service received a \$1 million gift to fund an endowed ophthalmology internship position.
- Established a new, state-of-the-art diagnostic imaging laboratory (Comparative Ophthalmic Imaging Lab), which will be used both for clinical patients and clinical trials.
- Equine Ophthalmology continued to grow since hiring a dedicated equine ophthalmologist, Dr. Mary Lassaline.
- The service now has six permanent faculty members, which is the largest of any ophthalmology team in North America.
- Clinical trials continue to be an important part of the service, with 10 current trials being conducted.
- Residents continued the long-standing (since 1984) tradition of a 100 percent pass rate of the board certification exam.

Zoological Medicine

- Provided state-of-the-art care to the animals at the Sacramento Zoo, including the first birth of a giraffe at the zoo in nearly 30 years.
- Worked with the keepers at the Sacramento Zoo to provide care to a giraffe with chronic arthritis, including providing corrective trimming, acupuncture, laser therapy and a custom-fitted boot which she has been trained to wear.
- In collaboration with the Anatomic Pathology Service, discovered a new amdoparvovirus in red pandas.
- By conducting comprehensive health surveys and implanting radiotransmitters, the service is actively engaged in assessing the health and fecundity of giant garter snakes, as well as Alameda stripped racers in the central valley of California. The garter snake program has been in existence for 20 years.
- Assisted California Fish and Wildlife in providing diagnostic examinations to bears and mountain lions.

Veterinary Center for Clinical Trials

- Maintained more than 60 ongoing clinical trials in four species.
- Launched a monthly update via email to alert clients and referring veterinarians about clinical trials.
- Added another clinical trial coordinator with specific technical skills in high-quality data collection and patient management.





- Added additional administrative support to assist with clinical trial management.
- Served as an instrumental factor in creating the American Veterinary Medical Association clinical trial database, which will showcase veterinary clinical trials that are available around the country.

Small Animal Soft Tissue Surgery

- Members of the service presented nine research abstracts at the annual Veterinary Endoscopy Society meeting.
- Drs. Michele Steffey and Bill Culp presented abstracts at the Veterinary Society for Surgical Oncology meeting, and the inaugural meeting of the Veterinary Interventional Radiology and Interventional Endoscopy Society.

- Dr. Bill Culp was voted president-elect of the Veterinary Society of Surgical Oncology.
- Dr. Michelle Giuffrida joined the service as an assistant professor, and was an invited speaker at the annual American College of Veterinary Internal Medicine meeting, where she presented two research reports in the oncology section.
- Dr. Ingrid Balsa joined the service as an assistant professor following the successful completion of her residency.
- Dr. Phil Mayhew co-edited the textbook Small Animal Laparoscopy and Thoracoscopy, the first dedicated veterinary textbook on minimally invasive surgery.
- The service continues to pioneer research and clinical trials in a variety of minimally invasive and interventional procedures to improve patient outcomes.

Oncology and Radiation Oncology

- Faculty members of the service published 14 peer-reviewed scientific articles involving bench top research and clinical trials.
- The oncology residency program is expanding to include training in clinical trials.
- Dr. Jennifer Willcox joined the team as an assistant professor of clinical medical oncology.
- Radiation Oncology implemented a specialized type of radiation called stereotactic radiotherapy to treat more than two dozen dogs and cats with brain tumors.

Client Services

- Scheduled more than 50,000 appointments and logged a record-breaking number of telephone calls between three reception areas of the Small Animal Clinic, Large Animal Clinic and the Center for Companion Animal Health.
- Held annual staff retreat to discuss and improve customer service standards.
- Hired Lisa Winn as Neurology/Neurosurgery Service coordinator for referring veterinarians.

Companion Exotic Animal Medicine and Surgery

- Treated approximately 2,300 companion animals and wildlife, including more than 250 different species or breeds of birds, rabbits, ferrets, rodents, reptiles, amphibians, non-human primates, marsupials and fish presented as primary care appointments, referrals and more than 730 emergencies.
- Worked in conjunction with the California Raptor Center to rehabilitate and release injured raptors, and provided primary veterinary care for animals at the Micke Grove Zoo in Lodi.
- Faculty members and residents of the service published 26 articles in peer-reviewed journals, 12 book chapters, gave more than 40 presentations at continuing education events or scientific national/international conferences, and received more than \$60,000 in research grants.
- Dr. Jessica Emerson joined the service as a staff veterinarian, and Dr. Brittany Stevens joined as an aquatic animal health fellow.
- Dr. Sara Gardhouse won the "Small Animal Resident of Year" award from graduating small animal students, and Kristina Palmer, RVT, VTS (Clinical Practice-Exotic) celebrated her 25th anniversary working at the hospital.
- Dr. Joanne Paul-Murphy spent much of her sabbatical time in New Zealand working with the Kakapo Recovery Program. She was given a Distinguished Service Award from the New Zealand Department of Conservation.

Small Animal Internal Medicine

- Dr. Chen Gilor joined the faculty as an assistant professor. His extensive knowledge in veterinary endocrinology will offer clinical and research expertise, particularly in the field of diabetes mellitus.
- The service facilitated more than 5,600 patient visits. Leading the team are eight board-certified specialists overseeing six residents with a focus in sub-specialties including: respiratory

medicine, endocrinology, nephrology, hemodialysis, urology, gastroenterology and infectious diseases. In addition, two registered veterinary technicians joined the team.

- Several clinical trials were conducted: Drs. Jodi Westropp and Jane Sykes completed a trial evaluating alternative therapies for treating urinary tract infections; Drs. Westropp and Jonathan Dear began a trial evaluating a dissolution diet for suspected struvite stones in dogs; Dr. Ann Della Maggiore began a study evaluating diagnostic testing in dogs with Cushing's disease; and Dr. Lynelle Johnson started a trial to investigate an antiviral in cats with upper respiratory infection.
- The service published nearly 40 peer-reviewed journal articles, as well as various other publications including authoring book chapters and editing/co-editing books in areas of expertise.

Hemodialysis and Blood Purification

- The service hosted the 2016 IRIS Renal Week symposium at UC Davis. The week-long program devoted to nephrology and extracorporeal therapies attracted more than 140 attendees from around the world for state-of-the-art lectures and interactive laboratories presented by an internationally renowned faculty.
- The UC Davis Hemodialysis Academy is enrolling its second class, which will start in September. The first class held its certification ceremony in June for participants who completed the inaugural two-year Hemodialysis Academy—a great success providing 150 hours of instruction to veterinarians throughout the world who share an interest in extracorporeal therapies. The Academy is delivered via a web-based platform and illustrates the opportunities and value of providing distant education where none exists.



Dermatology

The service completed one study and started another looking at possible new treatments for canine pemphigus foliaceus.

IAM R. PRITCHARD ERINARY MEDICAL ACHING HOSPITAL

- Drs. Stephen White and Catherine Outerbridge attended the 8th World Congress of Veterinary Dermatology conference in France—the largest veterinary dermatology meeting ever, with more than 2,000 attendees. Drs. White and Outerbridge were, respectively, Secretary and Program Committee Co-Chair, and both presented papers at the Congress.
- Faculty members published several scientific papers in refereed journals on dermatology problems in dogs, cats, horses and guinea pigs.
- Dr. Elizabeth Goodale joined the service as a staff veterinarian following the successful completion of her residency.

Neurology / Neurosurgery

- The service's caseload grew by 10 percent and treated nearly 2,500 patients for disorders of the brain, inner ear, spinal cord, and vertebrae, as well as diseases affecting muscles, nerves and the neuromuscular junction.
- Neurosurgeons successfully treated Woodland Police Department K-9 Officer Peydro for extensive damage to his vertebrae caused by being hit by a car while pursuing a suspect. Pins were placed in his lower back during a 4-hour surgery. Thanks to the service's dedicated team, Officer Peydro was able to walk out of the hospital only nine days later.
- The service drew national attention from CBS News and FOX News for helping Leah the border collie walk again following a blow to the head and neck that left her paralyzed.



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