



## School Update and Impacts April 2017

### #1 IN QS WORLD UNIVERSITY RANKINGS FOR VETERINARY SCIENCE

The UC Davis School of Veterinary Medicine was once again recognized with the top spot in veterinary science in the latest QS World University Rankings (March 2017). First in veterinary science since the field was added to the rankings in 2015, UC Davis is renowned for applying a “One Health” approach to addressing critical health concerns on a local and global scale.

“The energy, passion, knowledge and skills that the UC Davis veterinary medicine community brings to their jobs every day is the secret to our success,” said Michael Lairmore, the school’s dean since 2011. “Our future, supported in part by generous philanthropic partners, will be shaped by our combined efforts as we push the boundaries of research discoveries, provide innovative educational opportunities for our students, bring advanced clinical services to our animal patients, and serve our communities by advancing the health of animals, people and the environment.”



### NEW VETERINARY CLASS OF 2021



The school is pleased to welcome the incoming veterinary students for fall, the Class of 2021, which includes 122 California residents, 20 non-residents, 2 WICHE residents, and 1 student from China. The class is made up of 115 females and 30 males for a total class size of 145 students, selected from a pool of 1040 completed applications. The average science GPA is 3.74. The class age ranges from 20-38, with an average age of 22. Forty-three percent of the class lists diverse or multi-ethnic backgrounds—UC Davis consistently ranks among the top three veterinary schools in student diversity. The students have indicated career

interests in academic/research/teaching (23), public health (7) and private practice or specialty practice (115). The class has a broad array of species interests including: small animal (60), mixed animal (31), and wildlife (18). Ninety seven class members obtained their primary undergraduate education in California with the remaining 48 attending college out-of-state. The school community looks forward to welcoming these bright new students at the student induction ceremony in August and learning more about their past experiences and future goals.

## VETERINARY MEDICINE STUDENT SERVICES AND ADMINISTRATION CENTER GRAND OPENING

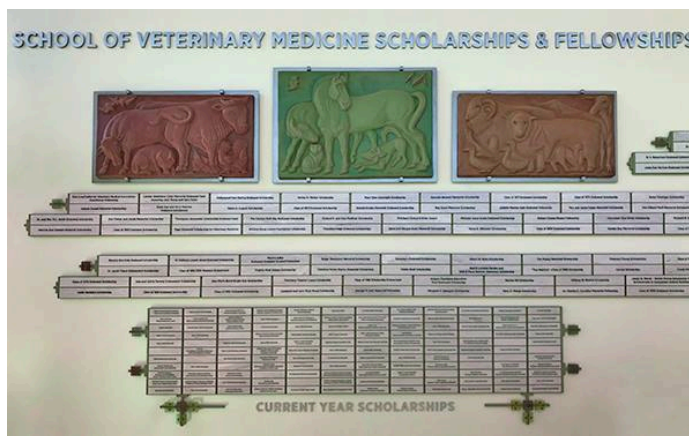


The new facility Grand Opening was a huge success with more than 250 attendees. The program included formal remarks by campus and school leaders, followed by tours and reception festivities. The center houses 100 staff and school leaders dedicated to providing a range of services and support for the school's community. This facility is a major piece of the school's overall masterplan designed to co-locate the teaching, research, clinical and administrative functions at the Health Sciences District in modern, state-of-the-art buildings. It serves as a gateway to the

veterinary medical campus and future home of the Veterinary Medical Center.

The center includes a new food service facility (Scrubs Cafe) which offers a large space for informal eating and networking, and an outdoor seating area for daily use and special events. Both the indoor and outdoor spaces include artwork to enhance the overall environment and engage the creative imagination of the community. A signature two-story mosaic wall features many hands making contact with a horse, depicting empathy and the direct connection between the human team and the animal during a clinical examination. Three bronze sculptures -- a goat, a pig, and a dog and two geese facing off at each other -- are installed outside in locations around the patio area and event lawn. The building also includes a

permanent scholarship donor honor roll. This feature recognizes the important contributions of alumni and friends to support our student's educational success.



## NEW FACULTY



**Dr. Daniel Hershberger** recently joined the Department of Medicine and Epidemiology as a Health Sciences Clinical Professor of Community Medicine. He received his DVM (1981) from UC Davis before working at the Veterinary Emergency Clinic, Pet Emergency Treatment Service and Campus Veterinary Clinic as a veterinarian from 1981 to 1985. Hershberger has served as Partner and Chief Medical Officer at All Pets Hospital in San Francisco, California since 1985. He brings more than 30 years of practice experience in Small Animal Primary Care to the school's Community Medicine Service.

## NEW LEADERS

**Dr. Jenna Burton** was recently appointed Associate Director of the Veterinary Center for Clinical Trials (VCCT). She has extensive experience in the design and implementation of veterinary clinical trials. As Associate Director, in coordination with VCCT Director Erik Wisner, Burton will provide leadership and administrative oversight of the VCCT, develop and refine strategic and business plans for the VCCT and help identify clinical trials opportunities.



Burton received her DVM from The Ohio State University (2006), and an MS from Colorado State University (2011). Board certified in medical oncology by the American College of Veterinary Internal Medicine, she was an Assistant Professor and Oncology Clinical Trials Coordinator at CSU before joining our faculty in 2014. Her research interests include comparative and translational oncology.



**Dr. Jodi Westropp** was recently appointed Director for Veterinary Medical Continuing Education. As a member of the faculty since 2003, she will be responsible for working with faculty to develop and coordinate continuing education programs designed to meet the needs of veterinarians in California, and throughout the Western U.S. Another important responsibility will be developing and testing the effectiveness of continuing education using distance methodologies and evaluation of this mode of continuing education to see how it can meet the needs of the veterinary community, both nationally and internationally. Westropp received her DVM (1997) and PhD (2004) from The Ohio State University. She is a Diplomate of the American College of Veterinary Internal Medicine.

## FACULTY RECRUITMENTS IN PROGRESS

- Professor of Neurology/Neurosurgery
- Professor of Dermatology
- Professor of Small Animal Orthopedic Surgery
- Professor (50%: 25% CCM, 25% CNPRC)/Professor In-Residence of Infectious Disease (50%) (2 positions)
- Professor (50%)/Professor In-Residence (50%) of Respiratory Biology or Toxicology
- Professor of Clinical Cardiology
- Professor of Clinical Small Animal Emergency and Critical Care
- Professor of Clinical Microbiology-San Bernardino
- Professor of Clinical Avian Diagnostics-Turlock
- Professor of Clinical Pathology-Tulare
- Large Animal Clinic Director
- Specialist in Cooperative Extension-Beef Cattle Herd Health and Production
- Specialist in Cooperative Extension-Dairy Cattle Production Health Management
- Health Sciences Assistant Clinical Professor in Community Practice-Theriogenology

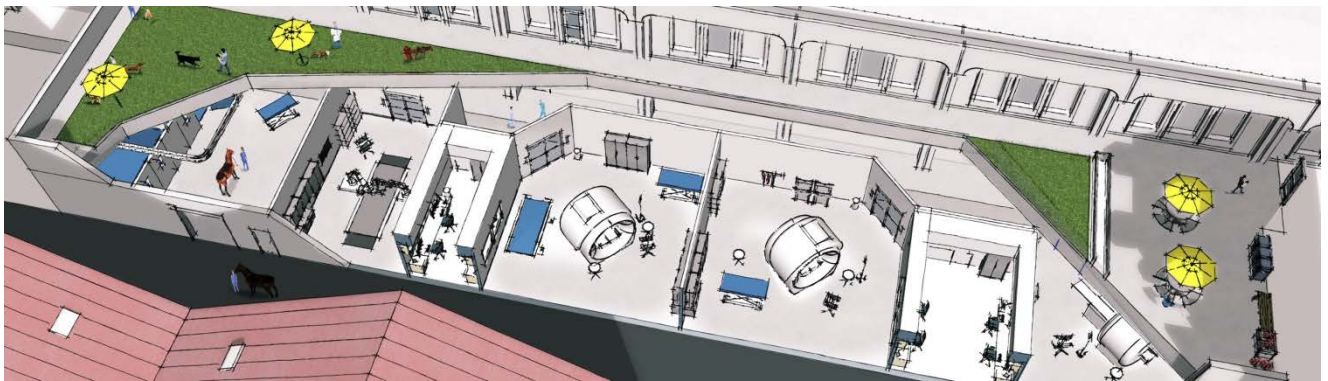
## VETERINARY MEDICAL CENTER – LEADING THE WAY

The future Veterinary Medical Center (VMC) will be built to promote clinical innovation, transformational discovery and compassionate healing; each animal and client will receive attentive and personalized care in the center of a world-leading biomedical research hub. Our veterinary scientists uniquely contribute to each patient's outcome as they push the envelope to advance care by setting new standards for veterinary medicine. The planning effort for the future VMC has identified ten project groupings:



- Large Animal Support Facility
- Equine Performance Center
- All-Species Imaging Center
- Small Animal Clinic Examination Rooms (remodel of existing space)
- Livestock and Field Service Center
- Small Animal Hospital East Wing
- Small Animal Hospital West Wing
- Community Practice Consolidation
- Equine Surgery and Critical Care Center
- Equine Isolation Facility

Each of these projects advances the school's ability to handle the challenging and increasing caseload, allows for the adoption of the latest technology in veterinary medicine and provides the infrastructure and efficient services to facilitate clinical research. Each stage of construction not only eases overcrowding with an enlarged footprint, but also enhances the integrated approach of the veterinary teams to deliver patient care, teach and develop new knowledge—applying basic science discoveries to the clinical setting for added patient benefit and student education.



An **All-Species Imaging Center**, critical to all 34 hospital specialty services, will be centrally located to serve all patients, large and small. The strategic placement of imaging equipment will expedite diagnosis and patient care, reduce stress and wait time for patients and maximize operational efficiencies. Staffed by the largest diagnostic imaging team in the world, the All Species Imaging Center will be at the cutting edge of detecting, diagnosing and treating injuries. The center's imaging procedures include:

- |                                  |                                    |
|----------------------------------|------------------------------------|
| Radiography (X-ray)              | Ultrasound                         |
| Computed Tomography (CT)         | Magnetic Resonance Imaging (MRI)   |
| Magnetic Resonance Imaging (MRI) | Positron Emission Tomography (PET) |
| Nuclear Scintigraphy             |                                    |

### STUDY SUGGESTS TWO WEEKS OF SUGARY DRINKS BOOST RISK FACTORS FOR HEART DISEASE



Beverages sweetened with low, medium and high amounts of high-fructose corn syrup significantly increase risk factors for cardiovascular disease, even when consumed for just two weeks by young, healthy men and women.

The study is the first to demonstrate a direct, dose-dependent relationship between the amount of added sugar consumed in sweetened beverages and increases in specific risk factors for cardiovascular disease. The data reinforced evidence from an earlier epidemiological study showing that the risk of death from cardiovascular disease — the leading cause of death in the U.S. and around the world — increases

as the amount of added sugar consumed increases. The results will be published in the June print edition of the *American Journal of Clinical Nutrition*.

“These findings clearly indicate that humans are acutely sensitive to the harmful effects of excess dietary sugar over a broad range of consumption levels,” said Kimber Stanhope, the study’s lead author and a research scientist in the UC Davis School of Veterinary Medicine.

The 85 participants, including men and women ranging in age from 18 to 40 years, were placed in four different groups. During 15 days of the study, they consumed beverages sweetened with high-fructose corn syrup equivalent to 0 percent, 10 percent, 17.5 percent or 25 percent of their total daily calorie requirements. The 0-percent control group was given a sugar-free beverage sweetened with aspartame, an artificial sweetener. At the beginning and end of the study, researchers used hourly blood draws to monitor the changes in the levels of lipoproteins, triglycerides and uric acid — all known to be indicators of cardiovascular disease risk. These risk factors increased as the dose of high-fructose corn syrup increased.

Even the participants who consumed the 10-percent dose exhibited increased circulating concentrations of low-density lipoprotein cholesterol and triglyceride compared with their concentrations at the beginning of the study. The researchers also found that most of the increases in lipid/lipoprotein risk factors for cardiovascular disease were greater in men than in women and were independent of body weight gain. Stanhope noted that the study findings underscore the need to extend the research using carefully controlled dietary intervention studies, aimed at determining what would be prudent levels for added sugar consumption.

## **EVENING OF GRATITUDE**

The school honored scholarship donors and student recipients in early April at the annual Evening of Gratitude. The school provided \$6.7 million in total support for to students this year—\$2.5 million from gifts and endowments and \$4.2 million in grants. That support is made possible by the generosity of our individual, association and corporate scholarship donors.

A few examples of new investments in students include:

- The Ebony Compassionate Care Scholarship Fund created by alumni from some of our recent classes— Dr. Anjolie Daryani, Class of '15, and Dr. Dustin Noack, Class of '14. Their gift will support a student who demonstrates exceptional compassionate care for animals.
- The Old English Sheepdog League of Northern California created two scholarships—one in memory of Ms. Debra Lehr and the other in memory of Ms. Jennifer Ansell.
- The Marty Bryant Memorial MPVM Scholarship fund in honor of Ms. Bryant’s longtime administrative support to the MPVM program and the school.
- The Northern San Joaquin Veterinary Medical Association Endowed Scholarship to serve veterinary students graduating from high schools primarily in northern San Joaquin counties who are interested in either small or large animal practice.



The evening also included talks by newly appointed Associate Dean of Student Programs Karl Jandrey, and student speaker Spencer Fennick, Class of 2018. Fennick has served as a tour guide for the veterinary hospital since 2015 and has participated as a teaching aide in the summer UC Davis Cosmos program that encourages high school students to consider future study in STEM (Science, Technology, Engineering and Mathematics.)

"We are grateful to our donors for the generosity, commitment, and belief that UC Davis will carry a legacy that lives on long into the future," said Michael Lairmore, dean. "These future gifts will make possible what we have only dreamt about or have yet to plan. We will never forget the trust placed in us through these investments in our students and the future of our university."

Dean Lairmore also shared a video that highlighted the impacts of scholarships to students and benefits to those who provide them. (Video available at: [www.youtube.com/watch?v=oVsr0-01yIA](http://www.youtube.com/watch?v=oVsr0-01yIA))

## ARE GENETICALLY ALTERED MOSQUITOS THE BEST WAY TO COMBAT MALARIA?



Scientists have used genetics to alter mosquito populations for several decades, to try to eliminate diseases such as malaria and more recently Zika. But these efforts — when they've worked at all — have only partially addressed the problem.

Now, scientists want to use a powerful new technology with the potential to change or wipe out an entire species of mosquito. The key tool is something called a "gene drive." These alter genes so that, when the insects reproduce, they actually change the entire gene pool. In some cases, gene drives could successfully eliminate a species. This is one of the approaches being prepared by scientists in a small village in Burkina Faso called Bana, a place where malaria is a huge problem.

"A gene drive takes advantage of the chemistry in the cell so that all of the offspring from a parent carrying that copy will inherit that gene," says Professor Gregory Lanzaro, director of the Mosquito Research Laboratory at the School of Veterinary Medicine. "So, it allows us to introduce genetic material into a wild population and have the frequency of that material approach 100 percent."

But, releasing a gene drive into the wild has never been done before. What could go wrong with this untested approach? And what might be the domino effects of eliminating entire species, even if they're pesky insects? Those are still big, open questions. There are environmentalists and researchers who are worried about the risks. Last year, a ban on gene drives was proposed at a United Nations biodiversity convention, but governments largely rejected the idea. Environmental groups such as Greenpeace and GeneWatch plan to continue to challenge the use of gene drives in the wild and to propose greater regulation of the technology.

Lanzaro, who does genetic experiments on mosquitos in Africa in an effort to combat malaria, says the research happening in Burkina Faso does have its risks — but he contends they are probably minimal.

## VETERINARIANS SHARE BLOOD PURIFICATION TECHNIQUES WITH HUMAN MEDICINE COLLEAGUES

Drs. Larry Cowgill and Sheri Ross from the UC Veterinary Medical Center - San Diego (UCVMC-SD) were highlighted at the UC San Diego School of Medicine's 5th Annual Essentials and Advances in Apheresis Therapies program. With the help of Jhun Marquez, an apheresis nurse at UC San Diego, the trio used some "tricks" developed at UC Davis to provide a live visual demonstration of the principles and benefits of therapeutic plasma exchange (TPE) and plasma adsorption in a simulated canine patient. The demonstration was provided to an international audience of 160 physicians, nurses, trainees, and industry representatives and illustrated the kinetics of the removal of pathologic substances (antibodies, toxins) from the blood of human or animal patients.





A follow up demonstration illustrated the complete removal of a simulated pathologic substance (purple dye) from flowing plasma (separated from the cells by the apheresis machine) by an adsorbent column simulating the treatment of a poisoning or the selective removal of pathologic chemicals in the blood that have been induced by a disease process.

### *Simulated Blood Purification with Plasma Adsorption*



The demonstrations documented the clinical benefits provided by Therapeutic Apheresis Medicine available at the UCVMC-SD for the management of immune-mediated diseases exogenous poisoning, and a variety of other disease indications.

## **CENTER FOR DISEASE CONTROL (CDC) VETERINARY STUDENT DAY**

Ten UC Davis veterinary students and faculty mentors Ashely Hill and Janet Foley joined hundreds of veterinary students and faculty from across the country at CDC Veterinary Student Day. Organized by the CDC's National Center for Emerging and Infectious Zoonotic Diseases, the event's theme was "The Secret Life of Vets and Pets." The bi-annual conference focuses on the critical role veterinary medicine plays in global public health and encourages student interest in veterinary public practice careers.

"Visiting CDC was like a trip to Disneyland for nerds," said Kim Conway, Class of 2018. "We talked with Dr. Robyn Stoddard (UC Davis '00) and heard firsthand about her challenges responding to the Ebola outbreak."



CDC Acting Director Dr. Anne Schuchat kicked off the event which featured a number of presentations that showcased epidemiology and science in action, public health challenges, emerging zoonotic disease threats and control strategies, and the value of the One Health approach. Topics included Ebola, Rabies, MERS, E.coli 0157 and Rocky Mountain Spotted Fever. A "Meet the Public Health Experts" panel featured professionals from several federal agencies (CDC, USDA FSIS, USDA-APHIS, FDA) and veterinary associations (AAVMC, AVMA and NASPHV).

"The most inspirational part of the trip was meeting with UC Davis alumni," said Lynae Shubin, Class of 2019. "I was so impressed with their success and it was incredible to think that they were once exactly where I am now."

Students had the opportunity to network, making valuable contacts with veterinarians already working at the CDC. One of the highlights for the team was hearing the different career and education paths that veterinarians in public health careers had taken to get to their current positions and the variety of career opportunities -- from laboratory work to outbreak response.

"My career focus is on the larger issues in infectious disease prevention and control through a One Health perspective," said Anne Kimmerlein, a graduate student in the Master of Preventive Veterinary Medicine program. "In fact, my goal is to participate in the Epidemic Intelligence Service at the CDC after graduation."

## WASTEWATER TREATMENT PLANTS ADD RISK FOR ORCAS

Orcas in the Pacific Northwest are already stressed from pollution, noise from vessel traffic and lack of food because of declining salmon runs. In the first study of its kind, scientists have now identified a fourth risk factor: pathogens that could hurt the endangered Southern Resident Killer Whale population — possibly from human sewage.

Reduced to 78 animals, the orcas are in an uphill battle for survival. In research over four years, scientists found yet another reason why, detected in their exhaled breath.

In their paper published in Nature's Scientific Reports, scientists detailed their research using petri dishes extended on 25-foot-long poles to capture samples of orcas' breath as they came to the surface in the wild and exhaled. The whales exchange as much as 85 percent of their lung capacity when they come to the surface to breathe, so the dishes got a blast direct from the microbiome within the creatures' lungs.



What scientists discovered in 26 samples from orcas around the San Juan Islands was a bevy of microbes that they analyzed and screened for antibiotic resistance. They were looking for evidence of human activity and in particular waste seepage into the marine environment. That's important because the pathogens can sicken both orcas and people. One possible source of the pathogens is human sewage.

“It is noteworthy that within 30 miles of the study area the city of Victoria, B.C., does not have a secondary sewage treatment facility, and instead discharges primary treatment product from the resident population of approximately 360,000 to the Salish Sea,” the scientists wrote. “A correlation may exist between the lack of secondary treatment for sewage entering the Salish Sea and the presence of antibiotic resistant bacteria within ... breath samples.”

Linda Rhodes, research microbiologist of the Northwest Fisheries Science Center in Seattle and an author of the paper, said orcas are susceptible to many of the same diseases we are, which makes cleaning up effluent going into the Salish Sea all the more important.

Secondary sewage treatment kills many more pathogens in sewage, and while it is planned for Victoria, the controversy over its lack has raged for decades in Cascadia. The Capital Regional District of southern Vancouver Island now is launching work on a state-of-the-art plant to be completed by 2020.

“The study shows how linked people are to the water and the animals in it, something that can be easy to forget,” said Joe Gaydos of the SeaDoc Society, a marine conservation nonprofit. “We are way more connected to the orcas than we think. “We have this artificial separation in our minds. We are just beginning to understand how closely tied our health is to their health.”

## UC DAVIS RESIDENT SPENDS YEAR AT SAN DIEGO ZOO

Dr. Mary Thurber, a resident with the school's Zoological Medicine Service completed her first year at the Veterinary Medical Teaching Hospital and the Sacramento Zoo. Now Thurber is spending her second year at the San Diego Zoo, and she's continuing to add to her impressive lifelong list of accomplishments.





As an 8-year-old living in Australia for a year, she insisted to her parents that they see wildlife in its natural environment, not just in a zoo. So vacations on Australia's east coast involved seeking out platypuses, koalas, wombats, and other species in nature.

As an undergrad at Stanford University, Thurber researched wild elephants and did her honors thesis on elephant parasites. This enabled her to travel to Namibia to study them in their natural habitat. She also routinely shadowed an equine veterinarian who practiced close to campus. Having grown up in Madison, Wisconsin, she was able to work with a researcher at the University of Wisconsin (UW) Comparative Orthopaedic Research Laboratory in the summers, leading to her choice of UW for veterinary school.

Thurber had an active four years of veterinary school: externships at Chicago's Brookfield Zoo, the North Carolina Zoo, the San Diego Zoo Safari Park, and the Wildlife Health Center at UC Davis; participating in a published study on ecohealth and primate parasites in Uganda; and flamingo research that was published in the *Journal of Zoo and Wildlife Medicine*.

In her current position as a UC Davis resident at the San Diego Zoo, Thurber helps care for more than 3,700 animals, which consist of more than 650 species and subspecies. The team of veterinarians has an active case list of approximately 200 animals that are being medically cared for at any given time. Thurber's current list of patients is a great example of the diversity of animals that zoo veterinarians care for every day: a female fishing cat the zoo is hoping to breed that is receiving a reproductive examination; a bonobo with respiratory illness; a chestnut-breasted malkoha that is losing weight; a basilisk lizard with a traumatic tail injury; and an infant Soemmerring's gazelle with failure of passive transfer (didn't nurse from its dam to receive adequate antibodies).

This year at the zoo, and next year's residency rotation at the San Diego Zoo Safari Park and SeaWorld San Diego, align perfectly with Thurber's career goals of working in zoos with a strong focus and commitment to conservation nationally and internationally.

The zoological medicine residency at UC Davis is one of only 18 American College of Zoological Medicine (ACZM)-approved training programs. The ACZM is a small specialty college with a very strong UC Davis representation. With typically less than a 50 percent passing rate, the ACZM board certification examination is considered to be one of the most difficult. However, each of UC Davis' last five residents have passed the examination upon completion of the residency program.

### **PREMATURE FOAL SUCCESSFULLY TREATED BY HOSPITAL TEAM**

Brave was born five weeks premature and immediately brought to the UC Davis veterinary hospital with his dam, Ally, who was also experiencing a life threatening condition with uterine artery bleeding. Upon arrival, the colt was lethargic with diarrhea and mild colic. They were received by the Equine Internal Medicine and Equine Medical Emergency, Critical Care and Neonatology Services. The team, led by faculty member Dr. Gary

Magdesian and residents Drs. Rana Bozorgmanesh and Fiona Wensley, focused on the foal, while Dr. Krista Estell and resident Dr. Fauna Smith focused on the mare. A number of staff and students joined the care team to help in this critical



situation. An initial physical exam in the Lucy Whittier Neonatal Intensive Care Unit (NICU) found signs consistent with a premature foal, pneumonia, and sepsis. Bloodwork was performed promptly, and showed that the colt had decreased protein and globulin counts, specifically a low Immunoglobulin G (antibody), indicating he didn't receive enough colostrum, which left him vulnerable to infection.

Brave remained in the NICU for further monitoring, diagnostics and intensive treatment of many health issues common to premature foals, including recurrent diarrhea, hypothermia, hypoproteinemia, and poor tolerance of milk feeding. An IV catheter was placed to help facilitate fluid therapy along with other medications (antibiotics and gastroprotectants) being administered. He was provided parenteral nutrition along with other supportive medications to help stabilize him. Brave was also administered a plasma transfusion, in order to give him the necessary immunoglobulins he didn't receive from his dam's colostrum.

Ultrasound examinations revealed a pulmonary infection with small areas of aspiration pneumonia being visualized, as well as a large bladder that required placement of a urinary catheter to prevent rupture. Radiographs confirmed the premature status of the colt by showing that the cuboidal bones within the carpus and tarsus (knees and hocks) were not fully ossified (had not yet turned into bony tissue). Because of this, Brave had his own personal foal sitters and technicians in order to prevent him from standing excessively and crushing these soft, cartilaginous bones. He had assisted standing and a physiotherapy program developed by Dr. Magdesian to keep the bones from being crushed while still allowing for strengthening of the limbs and muscles. This condition required Brave to remain hospitalized for many weeks and in order to prevent limb contracture, the team performed passive range of motion exercises several times per day.

Premature foals have difficulty transitioning to extrauterine life, meaning they are physiologically not always ready to thrive outside of the mare's uterus. Their immune system is immature, and they often don't ingest enough colostrum. This puts them at high risk of developing sepsis, or blood stream infection. They often require plasma transfusions to ensure adequate immune function, as well as antibiotics to prevent sepsis. The foals can have reduced breathing efficiency, and may require oxygen supplementation or respiratory stimulation. They may be intolerant of milk feeding and require parenteral nutrition (IV protein and carbohydrates) while their gastrointestinal tract adjusts to milk, as well as require enzymes to help with digestion (lactase enzyme). They may be unable to urinate, and require bladder catheterization. Their eyes can develop corneal ulcers and require close monitoring, sutures or staples if they have entropion (a common problem of premature foals where the eyelids turn in), along with eye lubricant. Like in Brave's case, they can have leg issues as well. In short, they often require intensive care, with patience while their bodies adjust to life outside of the mare's uterus.

Radiographs were performed weekly to track Brave's bone ossification. After five weeks in the NICU, Brave progressed to complete ossification. Following a few more days of increasingly good health, he was ready to be discharged. In addition, his dam Ally resolved her uterine artery bleeding and also went home healthy. Being able to facilitate all of Brave's care under one roof is a unique advantage of the UC Davis NICU team.

## **PROFESSIONAL CONTINUING EDUCATION**

June 2-4 -- Blood Bank Boot Camp, UC Davis

June 22-27 -- International Society for Anthrozoology Conference, UC Davis

July 22-23 -- 10th Annual Back to School Seminar, UC Davis

October 13-15 -- Fall Festival, UC Davis

Registration information and the full CE calendar is available at: <http://www.vetmed.ucdavis.edu/CE/>

## RECENT FACULTY PUBLICATIONS

[Treatment of MRI-Diagnosed Trigeminal Peripheral Nerve Sheath Tumors by Stereotactic Radiotherapy in Dogs.](#)

Hansen KS, Zwingenberger AL, Théon AP, Pfeiffer I, Kent MS.

J Vet Intern Med. 2016 Jul;30(4):1112-20. doi: 10.1111/jvim.13970. Epub 2016 Jun 8.

PMID: 27279132

[Operational challenges and opportunities in pastured poultry operations in the United States.](#)

Elkhoraibi C, Pitesky M, Dailey N, Niemeier D.

Poult Sci. 2017 Mar 3. doi: 10.3382/ps/pew448. [Epub ahead of print]

PMID: 28339966

[100K Pathogen Genome Project: 306 \*Listeria\* Draft Genome Sequences for Food Safety and Public Health.](#)

Chen P, Kong N, Huang B, Thao K, Ng W, Storey DB, Arabyan N, Foutouhi A, Foutouhi S, Weimer BC.

Genome Announc. 2017 Feb 9;5(6). pii: e00967-16. doi: 10.1128/genomeA.00967-16.

PMID: 28183778

[Evaluation of dogs with genetic hyperuricosuria and urate urolithiasis consuming a purine restricted diet: a pilot study.](#)

Westropp JL, Larsen JA, Johnson EG, Bannasch D, Fascetti AJ, Biourge V, Queau Y.

BMC Vet Res. 2017 Feb 8;13(1):45. doi: 10.1186/s12917-017-0958-y.

PMID: 28178975

[Anti-GD2-ch14.18/CHO coated nanoparticles mediate glioblastoma \(GBM\)-specific delivery of the aromatase inhibitor, Letrozole, reducing proliferation, migration and chemoresistance in patient-derived GBM tumor cells.](#)

Tivnan A, Heilinger T, Ramsey J, O'Connor G, Pokorny J, Sarkaria J, Stringer B, Day B, Boyd A, Kim E, Lode H, Cryan SA, Prehn J.

Oncotarget. 2017 Feb 3. doi: 10.18632/oncotarget.15073. [Epub ahead of print]

PMID: 28178667

[The best defense is a good \(Protease\) offense: How \*Pseudomonas aeruginosa\* evades mucosal immunity in the lung.](#)

Miller LA.

Virulence. 2017 Jan 19:1-3. doi: 10.1080/21505594.2016.1278335. [Epub ahead of print] No abstract available.

PMID: 28102763