



## New Clinical Trials Center Launched

The Veterinary Center for Clinical Trials (VCCT) has officially been launched at the VMTH. The VCCT facilitates clinical trials being conducted at the School of Veterinary Medicine, serving as a one-stop portal for clinical investigators, animal owners, referring veterinarians, corporate sponsors and donors.

The VCCT facilitates provision of new and innovative diagnostics and therapeutics to companion animals and their owners. Companion animals with naturally-occurring diseases offer a unique opportunity to make future advances in clinical veterinary medical practice. Simultaneously, veterinarians are able to provide advanced options for these patients, beyond the current standard of care.

The VCCT assists veterinary clinicians in initiating clinical trials by providing expertise and administrative support for grants, contracts, intellectual property, material transfers, regulatory approval and compliance, data collection and management, and marketing. In partnership with other campus units, the VCCT also fosters strategic relationships

with other academic institutions, government agencies and private industry to improve the connection between investigators and a variety of great opportunities.

Going forward, the VCCT's primary goal is to become a nationally-recognized center for veterinary clinical trials. Focusing on the following three areas will help the center achieve that goal: accelerating the identification and development of diagnostics and therapeutics to benefit veterinary patients and people; strengthening established ties and forming new ones between health units throughout the UC system; and increasing the visibility and importance of veterinary medicine within the biomedical sciences.

Leading the way at the VCCT is new VMTH hire Chrissy Kapelewski, PhD, who has already made a significant impact in her role as clinical trials analyst. To learn more about the VCCT, visit their new website at [www.vetmed.ucdavis.edu/clinicaltrials](http://www.vetmed.ucdavis.edu/clinicaltrials). The VCCT can be reached via email at [vetclintrials@ucdavis.edu](mailto:vetclintrials@ucdavis.edu) or by phone at (530) 752-5366.

## UC Davis Makes New Advances in Veterinary Blood Purification

Most people are familiar with the process of hemodialysis—taking impure blood from one's system, purifying it, and returning it to the body. That's a very simple explanation of a highly complicated process. A new, state-of-the-art blood purification procedure—therapeutic plasma exchange (TPE)—is making headway in veterinary medicine, joining the ranks of hemodialysis and another method, hemoperfusion. TPE is an apheresis (removal of impurities from blood) treatment in which plasma contaminated with damaging (pathogenic) antibodies, toxins or abnormal proteins is separated from the patient's flowing blood and exchanged with donor plasma that is returned to the patient to render the patient less susceptible to or free from immunologic attack or other pathologic processes.

Unlike hemodialysis or hemoperfusion (in which impurities are removed from intact blood), therapeutic apheresis separates the blood into its component fractions, and the pathogenic fraction is removed or specifically altered prior to return to the patient. The remainder of the (purified) blood is returned to the patient. The pathogenic component is delivered to a waste bag and discarded.

TPE has been used for decades in human medicine to manage a variety of disorders. The indications for, and evidence-based effectiveness of, TPE for these conditions has been grouped into four categories, establishing TPE as: the standard of care (category I), having evidence-based effectiveness (category II), having inconclusive evidence (category III), or having little identified effect (category IV). These categories help clinicians decide whether to use TPE to treat specific disorders. Experience with the use of TPE in animals is limited to date, and it is difficult to predict effectiveness comparable to that achieved for similar diseases in people; however, this classification provides guidance for potential use of TPE to treat animal diseases when the current standard of care is ineffective.

The Hemodialysis and Blood Purification Service at the VMTH now has experience in the use of TPE to manage immune-mediated neurologic disorders (myasthenia gravis and polyradiculoneuropathy) and immune-mediated hemolytic

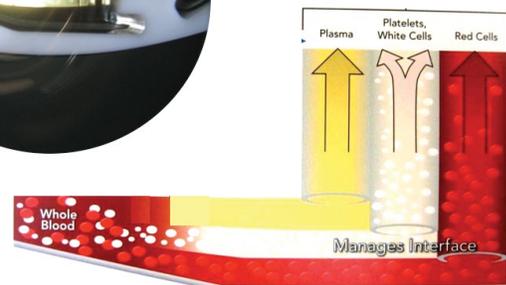
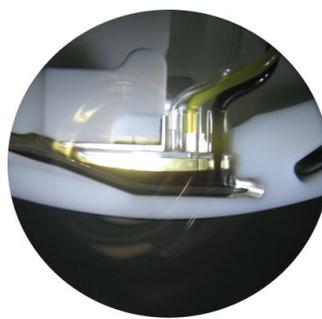


Illustration of the centrifugal separation and collection of blood components in an apheresis machine (right), and photograph of the actual separation cartridge in the spinning centrifuge (left).



Images of saline slide agglutination testing on blood from a dog with severe immune-mediated hemolytic anemia demonstrating extensive agglutination of the red blood cells before treatment, and complete correction of the agglutination following a single TPE treatment.

anemia refractory to medical management. TPE has emerged as a viable and promising treatment option for dogs with these two life-threatening conditions. The role of TPE in several other immune-mediated, metabolic, or toxic conditions in animals awaits further investigation. UC Davis researchers and clinicians are hopeful that the broad TPE categorizations and successes seen in human healthcare can soon translate to veterinary medicine for the benefit of animals.

To date, TPE has been used on about a dozen dogs and one horse. The treatment on the horse, conducted in May, is (to our knowledge) the first known equine application of TPE in veterinary medicine. To learn more about TPE treatments for your patients, contact Drs. Larry Cowgill or Carrie Palm in the VMTH at 530-752-1393.

## High School Students Explore Veterinary Futures

Since 1976, the University of California has assisted middle and high school students with preparation for college through its Early Academic Outreach Program (EAOP). EAOP gives California students—including those who are first-generation, socioeconomically disadvantaged and English-language learners—the opportunity to spend time on a UC campus and enlighten them to what their future with a college degree can become. This past Spring, EAOP worked with the SVM to offer the Veterinary Medicine Exploration Academy, a three-Saturday seminar to encourage gifted students to explore a future in veterinary medicine.

The seminar was attended by dozens of students who met a high GPA standard and were sincerely interested in a career in science. Almost all of the participants will be first generation college students. To kick off the seminar, SVM Dean Michael Lairmore inspired the students with his story of being a first generation collegian. The students were able to tour the VMTH, explore the pathology and anatomy labs with hands-on participation, as well as listen to presentations by SVM faculty, residents and technicians. If your clinic is in the Sacramento area, and you have a part-time opportunity for one of these aspiring veterinarians (volunteer or paid), please contact the EAOP office at (530) 754-8106.

## Field Services Makes “House Calls”

Providing a long-standing service to our local communities, the VMTH regularly provides on-site care for large animals at their stable, ranch or farm. The Equine Field Service mostly sees individual horses, while the Livestock Herd Health & Reproduction Service generally sees larger herds. Faculty and resident veterinarians in both Services provide scheduled and emergency on-farm care through a 24-hour mobile veterinary practice within a defined local area that stretches from Vacaville to West Sacramento to Capay.

The Equine Field Service provides preventive health care services such as routine vaccinations and dentistry, and is also able to address health problems involving all body systems in the field including ocular, respiratory and dermatologic problems. Lameness examinations, pre-purchase examinations, medical and reproductive evaluations, and minor surgeries, are among the many services offered. In addition, diagnostic procedures such as digital radiography, high resolution ultrasound, and dynamic endoscopy, can be performed in the field. Field Service veterinarians can also access more advanced diagnostic and specialized services by direct referral and transfer of cases to colleagues at the VMTH.



A view of equipment and supplies available in a Field Service truck.

The Livestock Herd Health & Reproduction Service provides veterinary care to dairies and ranches, primarily seeing cattle, goats and sheep. These regularly scheduled visits provide routine preventive health services and advanced care for a variety of conditions. Services to ranchers include evaluation of reproduction, milk quality, infectious disease prevention and control practices, birthing management, nutrition and

other health-related issues.

“Farmers, ranchers and horse owners often care for up to hundreds of animals,” states Dr. Joie Watson, Equine Field Service faculty member. “It is far more efficient and convenient to bring the veterinary services to them rather than transport all those animals to the Large Animal Clinic. Our Field Services veterinary teams are devoted and well-equipped veterinary health care providers.”

Providing outstanding client services support back at the hospital is Janette Barrango, a 35-year veteran of the VMTH. Janette handles all scheduling for Field Service and can answer most general questions about visits to farms and ranches. She can be reached at (530) 752-0292.

## Drs. le Jeune and Nieto Now Board Certified in Equine Sports Medicine and Rehabilitation

Drs. Sarah le Jeune and Jorge Nieto, both members of the equine surgery faculty, are now board-certified specialists in the American College of Veterinary Sports Medicine and Rehabilitation (ACVSMR). Drs. le Jeune and Nieto are also board certified in the American College of Veterinary Surgeons, and Dr. le Jeune is certified by the European College of Veterinary Surgeons.

The ACVSMR was approved as a new College by the American Veterinary Medical Association in 2010. The College serves the international veterinary community, with current diplomates from across Europe and North America. It was developed to meet the unique needs of athletic and working animals, and all animals in need of rehabilitation. The ACVSMR establishes and maintains credentialing and certification standards for veterinarians who have a special interest and expertise in sports medicine and rehabilitation.

Drs. le Jeune and Nieto can be reached through the Large Animal Clinic at (530) 752-0290.



Sarah le Jeune, DVM, DACVS, DECVS, DACVSMR, CVA, CertVetChiro



Jorge Nieto, MVZ, PhD, DACVS, DACVSMR

## A Note From the Director

Dear Colleagues,

Welcome to the summer issue of *VMTH Heartbeat*, our quarterly newsletter geared specifically to inform our referring veterinarians of developments at the VMTH. Thank you for the feedback you have provided regarding our efforts to improve our communication with you through this publication and other initiatives.

The annual cycle of clinical education of our senior students begins and ends in June. This year was no exception. A few days before welcoming the incoming seniors (class of 2014) to the VMTH, we celebrated the accomplishments of the 135 newly-minted veterinarians in the Class of 2013 at their commencement on June 14. We are proud of all they have achieved to this point, and look forward to the many contributions they will inevitably make to our great profession in the years ahead. On behalf of the graduating seniors, I want to thank you for helping them achieve success during their senior clinical year. I know many of you had regular interactions with them while getting updates on the patients you referred to the VMTH, or while providing them with valuable externship training opportunities in your practices. In particular, the communication experience they gained through their interactions with you will serve them well as they venture out into the “real world” to pursue the many opportunities their DVM degree affords them, be it in private practice, academia, industry or other branches of the veterinary profession.

Advances in veterinary and human medicine are fueled, at least in part, by clinical trials to test the efficacy of new

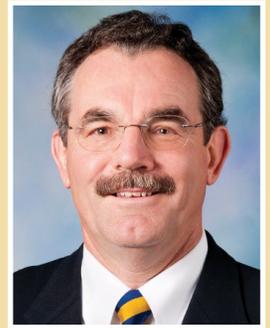
therapeutic drugs, vaccines, devices and approaches. While faculty at the VMTH have, for many years, been actively engaged in clinical trials that have led to many new treatment options, we have not had an organized structure to facilitate these activities or inform referring veterinarians and animal owners about ongoing clinical trials. I am pleased to announce that things are about to dramatically change with the opening of the Veterinary Center for Clinical Trials (VCCT) at the VMTH. We have made a concerted effort to make it easier for you and your clients to find information on our trials, while also helping our clinicians to recruit patients into clinical trials. To accomplish this, we have brought on a full-time clinical trials analyst, Chrissy Kapelewski, and created a dedicated website for the VCCT. You'll find a link to that site in this issue. Please click on it and discover our one-stop portal for all clinical trials-related issues. I encourage you to reach out to Chrissy if you or your clients have any questions related to enrolling patients in trials.

Summer is always an exciting time at the VMTH, as many new faces join us as we embark on another academic year. We will approach it with a renewed commitment to improving the health and welfare of animals, and work with you to achieve the best possible outcomes for your patients and clients.

Regards,



W. David Wilson, BVMS, MS, HonDACVIM  
Director, William R. Pritchard VMTH



W. David Wilson, BVMS, MS,  
HonDACVIM, Director VMTH

## CE Calendar

### Veterinary Continuing Education

(530) 752-3905, Fax: (530) 752-6728  
center4cpe@ucdavis.edu

### Upcoming Veterinary Continuing Education Events:

- September 20-21, 2013 – Veterinary Ophthalmology Symposium, Tenaya Lodge, Yosemite
- October 13, 2013 – 5th Annual UC Davis Veterinary Practitioners Seminar, UC Davis
- November 1-3, 2013 – Inaugural Donkey Welfare Symposium, UC Davis
- November 3, 2013 – VMTH/ San Francisco SPCA Year in Review Seminar, San Francisco

For more information on these and other 2013 CE events, please visit [www.vetmed.ucdavis.edu/ce](http://www.vetmed.ucdavis.edu/ce). To subscribe to VMTH Heartbeat, email [rjwarren@ucdavis.edu](mailto:rjwarren@ucdavis.edu).

## Connect with us

### For Appointments Call:

Small Animal Clinic: (530) 752-1393  
Large Animal Clinic: (530) 752-0290



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