



UC DAVIS LEADING THE WAY IN RENAL MEDICINE TRAINING AND SERVICES

■ By Rob Warren, UC Davis VMTH Communications & Marketing Officer

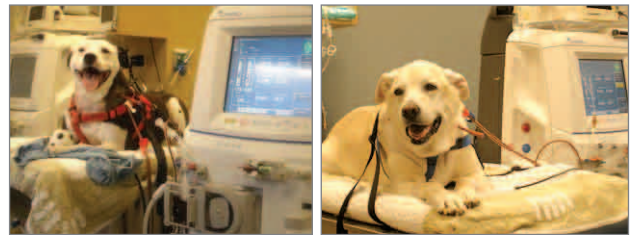
As the largest and most advanced teaching hospital in the country, the Veterinary Medical Teaching Hospital at UC Davis is committed to offering as many opportunities as possible for veterinarians to further their training in specialty areas. The VMTH currently offers advanced training through its house officer (residents, interns, and fellows) program in 34 specialty areas, making it the largest post-graduate training program anywhere in veterinary medicine. Currently, there are 109 house officers at the VMTH.

Since 1993, one of those specialty areas has been renal medicine. The history of renal medicine at UC Davis goes back to 1976 when Dr. Larry Cowgill, DVM, PhD, DACVIM, arrived on campus following an internship, residency, and graduate training at the University of Pennsylvania, which at that time was possibly the only veterinary school other than Purdue University that was experimenting with hemodialysis procedures. Dr. Cowgill brought that knowledge to UC Davis, and over the course of the next 40 years, helped UC Davis evolve into a world leader in renal medicine and extracorporeal (outside of the body) therapies.

Today, while renal medicine has greatly advanced, it still remains largely unavailable for patients at most veterinary hospitals, and even more unavailable for veterinarians looking to further their capabilities. Dr. Cowgill has made it a mission to change that over the past 20 years, establishing many opportunities for veterinarians to learn more about hemodialysis procedures and be able to offer it to their patients.

He developed the first training program for hemodialysis in 1993 as a two-year fellowship, allowing clinicians to receive advanced training in kidney disease and extracorporeal procedures. The fellowship is currently on hiatus due to state budget cuts and the fact that it is extremely difficult for a clinician to give up two years of practice to pursue it. Currently, UC Davis offers a one-year internship as an introduction to this discipline.

Dr. Cowgill offers other learning opportunities, as well, including an international hemodialysis roundtable twice a month on the internet where clinicians worldwide gather to discuss cases, new treatments and new visions. Another internet-based learning opportunity is a virtual fellowship program where he mentors individuals three times a week online. Finally, Dr. Cowgill—in conjunction with UC Davis' Center for Continuing Professional Education—has organized the



Hemodialysis Academy, an online advanced training and certification program that will launch on September 15. To learn more about the academy, go to www.vetmed.ucdavis.edu/ce.

UC Davis currently offers three types of extracorporeal treatment modalities for patients in varying stages of kidney failure, acute poisonings, or with unresponsive immune-mediated diseases. Patients in Northern California can receive treatment at the VMTH, while patients in Southern California can receive treatment at its satellite facility, the UC Veterinary Medical Center-San Diego. The three treatments are traditional hemodialysis treatments (primarily for kidney failure), complemented by two additional extracorporeal therapies, which involve purifying the blood outside the body and then putting it back in the body.

The first is called hemoperfusion, which is similar to dialysis and often combined with it. This therapy, often used for poisonings, runs the blood directly over materials that can bind abnormal substances in the blood and remove them. The second type of extracorporeal therapy is called therapeutic plasma exchange, 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.

Until recently, UC Davis was the only academic program in the country utilizing all three treatment modalities. Dr. Cowgill and UC Davis helped set up the only other program—the University of Pennsylvania—and trained their people. Returning to Penn to train their clinicians brought a life's work in renal medicine full circle for Dr. Cowgill, returning to assist the program that started him down the renal medicine path. **P**