Canine Community Blood Donor Program Begins

Calli is a lively, healthy, young dog. So why is she in the clinic for a blood test? The dog and her owner, class of 2008 veterinary student Allen Page, are among the first to participate in a program to innovate the field of transfusion medicine.

“We are reaching out to area dog owners to develop a community-based canine blood donor program at the School of Veterinary Medicine,” says Sean Owens, assistant professor and veterinary pathologist.

Starting with volunteers from UC Davis, Owens and his team are developing the new approach, which eliminates the need for dogs to live at the school for the sole purpose of providing safe blood transfusions for hospital patients.

“We have begun identifying police dogs as potential blood donors,” says Owens. “Blood donation is minimally invasive for dogs. K-9 officers, in addition to facing a higher risk of injury than many dogs, are healthy, well-trained and large enough to donate adequate amounts of blood safely.”

In the coming months, veterinarians will screen 1,200 pets to develop a group of dogs able to donate one to three times per year, beginning in summer 2008. Pet owners living within 100 miles of Davis may sign up healthy dogs 1–5 years old as potential blood donors. The animals will receive regular health screenings, access to blood products and “thank you” gifts.

Owens says that the Community Blood Donor Program provides an opportunity to become involved in the veterinary community: “It’s a cool thing to know that you and your dog may save another dog’s life.”

More than 600 transfusions per year take place at the William R. Pritchard Veterinary Medical Teaching Hospital.

A new Transfusion Medicine Section will serve rising demand for blood products for dogs, cats, horses, cows, llamas, sheep, goats, pigs and other animals. Laboratory personnel will be able to test blood and cross-match it for patients. The veterinary blood bank will also be able to process and store cord blood for future use, process adult stem cells from equine patients and participate in transfusion medicine research.

Sean Owens, section head and medical director of the blood bank, says, “With our new equipment and expertise, we can offer almost all services for animals that humans receive.” The teaching hospital recently outfitted a laboratory suite with new equipment—including a state-of-the-art centrifuge in use elsewhere for humans only—and refrigeration units for blood storage.

Students who elect a rotation through the laboratory will gain substantial knowledge of transfusion medicine, and, says Owens, “They will learn about its applications in their future veterinary practices.”

Faculty researchers are collaborating to improve the processing, storage and use of animal blood products. One group has already developed a rapid blood-typing technique for horses that is available only through the teaching hospital. The research team is also investigating how adult stem cells might help veterinarians treat ligament, tendon or joint injuries and promote the healing of some fractures.

“Dyne Hansing, RVT, greets canine blood donor Calli.”

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