Sara Thomasy, a vision researcher in Surgical and Radiological Sciences, has come to know German shorthaired pointers (GSP) well over the past year. She is investigating an ocular disease that is more common in GSPs, which suggests that the disease may have a genetic component. If she can find that causing gene, veterinary scientists will be able to create a genetic test that may allow breeders to avoid producing dogs with corneal endothelial dystrophy (CED), eventually eliminating it from future generations of GSPs.

CED is an eye disease that causes premature degeneration of endothelial cells, which are critical to pumping fluid out of the cornea and maintaining transparency. It is a devastating disease in dogs that can result in blindness and severe ocular pain from secondary complications.

There are palliative treatments such as hypertonic saline to decrease corneal bullae formation, but the only definitive treatment for this condition is a corneal transplant. Unfortunately, transplants are rarely performed in canine patients with CED due to the expense of the surgery and follow-up care, relatively high risk of complications, and lack of appropriate donor tissue.

There may be hope on the horizon, though, for an alternative surgery to treat CED. Thomasy has performed the promising surgery several times on many breeds, including a GSP. The superficial keratectomy and conjunctival advancement hood flap surgery thins the cornea, improving a dog’s vision. To date, the surgery has been successful in nine dogs.

Thomasy’s research is part of an ongoing clinical trial at the school. For more information on this and more than 70 other current clinical trials, please visit the Veterinary Center for Clinical Trials’ website at www.vetmed.ucdavis.edu/clinicaltrials.