Background
- If your veterinarian suspects that your pet or horse has infectious keratitis (infection of the cornea) or a deep corneal ulcer, they will recommend taking a swab sample from the surface of your pet or horse’s cornea to determine the type of infection. Historically at UC Davis, we have used a topical anesthetic named proparacaine, which is applied to the surface of the eye before any samples are taken to minimize discomfort. Recently, a concern has been raised that proparacaine may inhibit growth of infectious organisms in the laboratory after a corneal swab sample is obtained. This means that even if your pet or horse has a corneal infection, we may not be able to grow the bacteria or fungi in the lab if proparacaine has been used before sample collection. Therefore, the purpose of this study is to determine the best procedure to follow when collecting culture samples, thereby ensuring the best diagnostic work up and treatment plan while minimizing discomfort.

Participation Requirements
- Dogs, cats or horses showing clinical signs of infectious keratitis

Procedures
- After your pet is randomly assigned to one of two groups, a veterinarian will collect a corneal sample from the affected eye of your pet twice. The first swab will be taken without a topical anesthetic and inoculated into a culture medium for analysis.
- Depending on the assigned group, your pet will then have either a drop of a sterile topical anesthetic (proparacaine) or sterile saline (i.e., no anesthetic) placed onto the surface of the affected eye. We will then swab the affected eye again for both groups as described above.

Owner Responsibilities
- Bringing your dog, cat or horse to the scheduled ophthalmology appointment
- Covering the cost of the first culture (as is standard)

Benefits
- The study will cover all costs associated with the second culture collection.
- Results from this study may help us find bacteria or fungi not routinely collected after use of a topical anesthetic and establish the best way to collect samples from future patients with infectious keratitis.
- Additionally, study results may be extrapolated to benefit human research.

PRINCIPAL INVESTIGATOR
Dr. Sydney Cartiff

CONTACT INFORMATION
(530) 601-7356 • sydney.cartiff@gmail.com
www.vetmed.ucdavis.edu/clinicaltrials/